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Application of the Kolb Learning Style Inventory and Border's Adaptation of the Model to Trumpet Instruction in the Applied Collegiate Trumpet Studio

Sarah Stoneback

University of Colorado Boulder, sarah.stoneback@montana.edu

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APPLICATION OF THE KOLB LEARNING STYLE INVENTORY AND BORDER'S
ADAPTATION OF THE MODEL TO TRUMPET INSTRUCTION IN THE APPLIED
COLLEGIATE TRUMPET STUDIO

by

SARAH LOUISE STONEBACK

B.A., Arizona State University, 2004

M.M., University of Colorado - Boulder, 2010

A dissertation submitted to the
Faculty of the Graduate School of the
University of Colorado in partial fulfillment
of the requirement for the degree of
Doctor of the Musical Arts
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This thesis entitled:
Application of the Kolb Learning Style Inventory and Border's Adaptation of the Model to Trumpet
Instruction in the Applied Collegiate Trumpet Studio
written by Sarah Louise Stoneback
has been approved for the Department of Brass and Percussion

Professor Terry Sawchuk, Committee Chair

Laura L.B. Border, PhD.

Date_____

The final copy of this thesis has been examined by the signatories, and we
find that both the content and the form meet acceptable presentation standards
of scholarly work in the above mentioned discipline.

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Abstract

Stoneback, Sarah Louise (D.M.A., Music, Brass Performance and Pedagogy)

Application of the Kolb Learning Style Inventory and Border's Adaptations of the Model to Trumpet Instruction in the Applied Collegiate Trumpet Studio

Dissertation directed by Associate Professor Terry Sawchuk

This dissertation explores a new perspective in teaching trumpet at the collegiate level. I conducted thirty lessons with five junior trumpet performance and education majors from the University of Colorado Boulder. During these research lessons, I combined two cognitive perspectives into teaching trumpet repertoire and concepts. I examined the effects of applying the raw score orders of Kolb Learning Style Inventory for student learning and Border's adaptation of the model for teacher instruction. Kolb arranges preferred learning styles along two different continua: thinking – feeling and watching - doing. Of course all people learn using all four approaches, but learners generally prefer some approaches more than others. Border's adaptations make the learning theory more applicable for teacher instruction. To these approaches, I added the methods of brass pedagogues Arnold Jacobs, Vincent Cichowicz, David Hickman and Clint "Pops" McLaughlin as they relate to Kolb's four poles of learning.

My research highlights the benefits in acknowledging each trumpet student as an individual learner with specific needs. The discussions and results presented highlight the benefits to combining a cognitive perspective with existing trumpet pedagogies. This document acts as a musical adaptation of Kolb and Border's perspectives in learning and instruction for trumpet at the collegiate level. My research suggests, counter to expectation, that students learn most through their least two preferred areas of learning; they experience the most inspirational "ah-ha" moments when taught to these areas. Furthermore, seven of Border's salient steps, from aesthetic to questioning, provide students with marked improvement in five significant areas of performance.

These were 1) visualization 2) technical facilitation 3) practice techniques 4) listening skills - pitch and interval identification/recognition, and 5) verbal communication between student/teacher. The results and methodologies presented in this thesis can be utilized to augment an overall approach to teaching trumpet, while also providing diverse modes of presentation when teaching repertoire.

To Ron and Margie Stoneback

Thank you so much for believing in me. For your love,
encouragement and emotional
and financial support I will always be grateful.
Thank you also for the coffee breaks!

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This document would not have been possible without student participants from the CU Trumpet Studio. I am thankful for the time and energy these students put towards the research lessons.

I would not be where I am today without the talents of those mentors and teachers from my past. Thank you to David Hickman, Stanley Friedman, Henry Charles Smith, John Colson, Harry Krueger, Bill Rowley, Marvin Stamm, Keith Johnson and last, but certainly not least, Ron Stoneback.

I am blessed with fun and supportive friends and family. Thanks to my parents, Ron and Margie Stoneback, along with my triplet trumpeting sisters, Mary and Kristin Stoneback. I am grateful for their friendship and our mutual love for music and coffee.

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CHAPTER ONE

INTRODUCTION

Roland Persson (2000) stated, “Teachers of musical instruments have a tendency to rely on historical and aesthetic tradition more than empirically based theories of learning, interaction, and communication” (Persson, 2000, pg. 26). This, Persson states is because, “master performers teaching at higher levels are selected on the basis of performance excellence, rather than on the basis of teaching skills and type of training” (Persson, 2000, pg. 26). Pursuing a Doctorate in Trumpet Performance and Pedagogy myself, I sought to examine this premise and recognized the possible need for personal teaching reform.

Having ample performance experience, I have at times witnessed my own disconnect between the performance world and music education. While I found my professional experience to be helpful in performance, once I began teaching in a studio setting, I felt I wanted to further develop and understand my own strategies of learning and teaching. Therefore the quest to grow my knowledge base in theory and practice was set in motion. I believe, as a performance major with an emphasis in pedagogy that we need to consider the importance of not just how to perform exquisitely, but also strive as instructors for educational excellence with each student. As I became more interested in educational practices, I found that I wanted to contribute more to my students’ improvement in their overall musicality, sound concept, creativity and technical facilitation. Sarasin (2006) suggests, “Research indicates that the relationship between learning styles and teaching styles is a factor in the success of postsecondary students” (Sarasin, 2006, pg. 2). I wondered if combining cognitive perspectives, which focus on students’ learning styles, with music pedagogue’s viewpoints might create more success for trumpet students at the collegiate level.

The premise of my dissertation is based upon research on thirty original trumpet lessons I conducted in the Fall of 2012. My research project was titled, “Matching or Countering Student’s Raw Score Order on the Kolb Learning Styles Inventory within the collegiate applied trumpet studio”. I incorporated David Kolb’s revised cognitive learning, experientially rooted model—the Kolb Learning Style Inventory—(Kolb, Smith, 1986, pg. 8)¹ and Border’s work using of the learning model to train teachers at the University of Colorado Boulder (Border, 1990, pg. 23). Upon being approved by the Institutional Review Board for research, I set out to discover what the implications of applying these perspectives to trumpet student’s learning experience might be.

I was first introduced to the Kolb LSI as a Lead Graduate Teacher in the Graduate Teacher Program (GTP) at the University of Colorado². We were taught and trained to apply the four poles of the Kolb model, which are concrete experience (CE), reflective observation (RO), abstract conceptualization (AC) and active experimentation (AE), to both our teaching and learning through writing discipline-specific lesson plans. In each lesson, we created assignments incorporating all four poles, and all five questions defined by Border, to better reach each student in the classroom.

We also worked with the Kolb LSI while administering videotape consultations, which were designed by Border to help and improve fellow graduate colleagues’ teaching (Border, 1990, pg. 116).³ I became increasingly intrigued by Border’s focus on the order of an individual’s raw scores upon witnessing the help it provided to colleagues both in the applied-studio and classroom teaching. I too benefited from incorporating the Kolb LSI and Border’s perspective in my own

¹ I received permission to use the Kolb LSI from the Hayes-Group. www.haygroup.com

² Founded in 1984, the GTP helps graduate students perform effectively as graduate teaching assistants (TAs) and graduate part-time instructors (GPTIs) in classes, recitations, and labs, while at the same time helping them learn skills to serve in the professoriate once they attain their graduate degree. Visit <http://www.colorado.edu/gtp/> for more information about the Graduate Teacher Program.

³ Visit <http://www.colorado.edu/gtp/> for more information about the Graduate Teacher Program.

teaching which led me to consider carrying out a research project where I would administer the LSI to my students and experiment with teaching them in different orders according to their scores on each pole. As a result, I examined how teaching to the student's raw score order (RSO) or counter raw score order (CRSO) might affect attitude, satisfaction and motivation and performance level. According to Border's experience, "the rank order [e.g. raw score order] of the scores on each style (AC, CE, RO, AE) indicates the individual's preferred learning order or information processing order and tends to be the order in which an untrained teacher always presents information" (Border, 1990, 31). In addition to examining this hypothesis, I also sought to collect the most salient aspects of the learning model and adaptations, specifically the poles and five steps or aspects of Border's "Definitions of the Poles for the Kolb LSI" (Appendix A, page 79). The data I collected when exploring this hypothesis, although limited in size, is thorough. The results highlight the benefits of combining a cognitive perspective to teaching with standard and accepted teachings of music pedagogues.

The four brass pedagogues' methods I chose to incorporate exhibit strong tendencies toward one specific pole in Kolb's four poles of learning. Each pedagogue served as musical inspiration, coinciding with Border's definitions of the poles and also the lesson template for each research lesson. My analysis places Arnold Jacobs' method high on the concrete experience pole primarily for his emphasis on singing during lessons, imagery in trumpet performance, and his acknowledgment of the aesthetic qualities in music. I view Vincent Cichowicz as closer to reflective observation for his incorporation of modeling as a teaching tool, which provides the basis for students to reflect, observe and watch, all characteristics present in reflective observation. I placed David Hickman close to abstract conceptualization for his theoretical discussions and analytical approach to trumpet literature. In addition, Hickman has compiled a pedagogy book, which thoroughly discusses multiple modes of teaching tonguing, musicality, equipment use, etc. further identifying with the analyzing of

trumpet and the abstract conceptualization pole of Kolb's LSI. However, this approach is not highlighted, rather my personal experience in applied studio lessons as an undergraduate student from 2000 – 2004 at Arizona State University, Tempe Arizona. Lastly, I see Clint "Pops" McLaughlin as representing active experimentation through his encouragement to "ask a question" for a fee⁴ and his experimentation and extension of common studies on the trumpet.

Neither the Kolb LSI nor Border's adaptation of the learning model is commonly found in music instruction. To address this, chapter two is an overview of both the Kolb LSI and Border's adaptation of the learning model. Ultimately, incorporating the learning theory and model into trumpet instruction addresses my desire to bring music education into a primarily performance degree.

Scope of Research

There is certainly no shortage of studies incorporating the Kolb LSI into educational settings, career placement or sociological fields. My methodology, scope, and objectives of this project have little precedence when compared to previous ruminations on this broad topic. There are several music educational studies that include learning styles in the discussion, which are primarily found in piano, vocal, and general music classes, however these studies do not incorporate the Kolb LSI as a basis for teaching and learning. There also exist music education articles highlighting the importance in recognizing students as individual learners, but none as related to applied trumpet instruction. For the purposes of my research, such studies mentioned did not influence my lessons or lesson structure. Additionally, they are too broad and not applicable to music or trumpet instruction. Further setting my research apart is my application of the four poles of the LSI to existing brass pedagogues. Although many of these pedagogues

⁴ McLaughlin offers these services at: <http://www.bbtrumpet.com>

incorporate principles of learning theories into their instruction, their teaching is not center around the principles of learning theories.

Applying specific learning models to the applied trumpet studio appears to be limited, if non-existent. Furthermore, the Kolb LSI is not generally incorporated in music teaching pedagogy. My perspective and use of the Kolb LSI and Border's adaptation are unique, and to this point have not been incorporated in the music field. Furthermore, I did not find any studies that examine my perspectives of both the Kolb and Border together. My use of the Kolb LSI, which highlights using the raw score order for student learning, and incorporation of Border's adaptation of the Kolb LSI for teacher instruction sets my research apart from existing studies.

There do, however, exist two sources that address the benefits of the Kolb LSI in vocal instruction, one at the collegiate level and one at all levels of education. Although both authors have had direct connections with the Graduate Teacher Program and Border's adaptations, neither considers the raw score orders or utilize Border's templates for teacher instruction. Kristine Hurst-Wajszczuk, (2010) suggests ways to apply the four quadrants or learning styles, defined by Kolb LSI into the vocal studio. Hurst offers practical advice to teach to each type of learner while teaching vocal concepts and repertoire, specifically double versus single consonants in Italian, which includes the heart, equation, product and question mark learner, using Border's terminology.⁵ Hurst suggests, "To grab the interest of the hearts in [her] class, [she] begins by explaining the importance of double versus single consonants by telling an applicable story." For the Equation learner, she suggests, "[considering] having the class timeline available". For the Questioners, Hurst suggests "[providing] multiple examples for students to try, requiring everyone in the class to attempt at least one." Finally, she suggests, when teaching the Products to allow students to "learn by making mistakes: having an opportunity to try examples in class

⁵ Border renamed Kolb's four quadrants to better relate for the novice teacher.

and make mistakes without penalty will often result in higher test grades”. (Hurst, 2010, pg. 425).

In my research, I utilize Border’s template for teacher instruction when teaching with the four poles, not the four quadrants, along with her definitions of the poles. Hurst does not combine these elements into instruction.

In Heather Cummins’ (2009) Thesis titled, “An Overview of Learning Styles and the Application of the Kolb Learning Inventory in the Higher Education Voice Studio,” Cummins discusses how to teach vocal students by using three different learning theories: VARK, Kolb LSI and Myers-Briggs. Cummins suggests that knowing the learning style of students will create a better lesson atmosphere, expressing, “when informed of their own learning style and that of their students, voice teachers will have more success with their students and a more enjoyable teaching experience” (Cummins, 2009, pg. 4). Unlike my research, Cummins does not highlight Border’s perspective of the Kolb LSI and the raw score order is not acknowledged.

I do not test the validity of utilizing the Kolb LSI to music instruction. I explore rather, how the raw score order of the Kolb LSI, which has not been examined in studies to this date, affects student’s motivation, satisfaction and attitude towards trumpet lessons. Additionally I created novel trumpet lessons based on Border’s definitions of the poles and template for instruction within the collegiate trumpet studio to examine the importance of understanding and comprehending the students we work with.

CHAPTER 2

KOLB & BORDER DISCUSSION

In this chapter, I provide an in-depth overview of both the Kolb LSI, and Border's work on the use of the individual's raw scores to determine his native instructional style and the need to adapt it to meet students' learning needs. These methods have not been explored previously in the applied trumpet studio. The following discussion of both the LSI and Border's adaptations of the model will give the foundational elements my research is built upon. Understanding these concepts and perspectives will serve as a necessary introduction and background for chapter three, where I outline my own adaptations of the learning models to research trumpet lessons. I first provide an overview of Kolb's model, then discuss Border's adaptations of the learning theory.

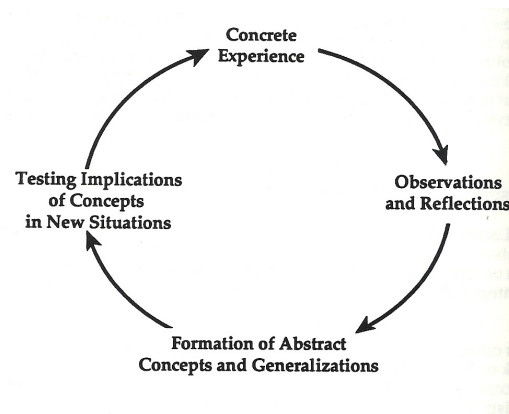
My main concern with the LSI lay in how Kolb and Border define the learning style of the student. Kolb defines his experiential circle of learning as following the order, CE, RO, AC, AE (Kolb, Smith, pg. 12). Border's experience with teachers on the other hand revealed that untrained teachers teach in their own raw score order, for example, RO, AE, CE, AC. The teacher's ability to develop effective communicative skills increases when incorporating the LSI; the new teacher's incorporation of this model greatly enhances the lesson plan and skill set necessary for success in the applied studio. With over twenty-five years of experience administering the LSI for videotape consultations, Border has created helpful adaptations for the classroom setting.

Kolb LSI Overview

The Kolb LSI is based upon experiential learning, a term coined by 20th century cognitive and constructivist psychologists, John Dewey, Kurt Lewin, Jean Piaget, William James, and Carl Jung to name a few (cited in Koob, Funk, 2002, pg. 294). Experiential learning gives experience a central role in human learning and development, occurring on a continuous basis in everyday life.

The LSI is a written inventory in which participants check off responses to twelve questions intended to measure how one learns in a specific, new situation, ultimately determining the learning style of that individual. Kolb explains, the twelve question, “self-administered, self-scored, self-interpreted instrument helps learners identify their learning style and how they absorb and deal with new information” (Kolb, 1986, pg.1).

In experiential learning, the process of learning is realized through a four-stage learning cycle, consisting of four poles in a specific order beginning with concrete experience, seen in Figure 1: Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation.



The Experiential Learning Model. From
“User’s Guide for the Learning-Style Inventory:
A Manual for Teachers and Trainers,” by Kolb, David, A., Smith, Donna,
M. Boston, Massachusetts: McBer & Company, 1986, p. 12.
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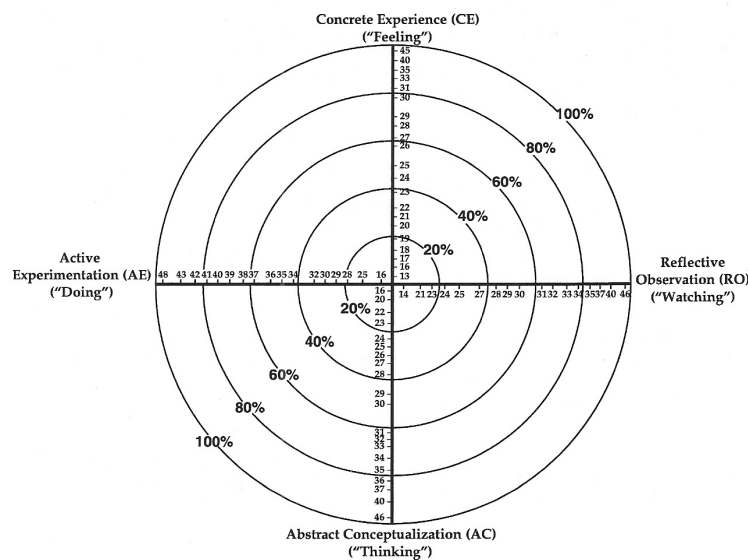
Figure 1. Kolb’s Cycle of Learning Model

In order to be an effective learner, this diagram depicts the cycle of learning as it relates to the four poles. Kolb recommends the learner must be able to:

“Involve themselves fully, openly, and without bias in new experiences (CE). They must be able to reflect and observe these experiences from many perspectives (RO); to create concepts that integrate their observations into logically sound theories (AC); and to use these theories to make decisions and solve problems (AE)” (Kolb, 1986, pg. 12).

Together, these four poles make up the cycle of learning. “This process is portrayed as an idealized learning cycle or spiral where the learner “touches all the bases”—experiencing, reflecting, thinking, and acting—in a recursive process that is responsive to the learning situation and what is being learned (Kolb, 2005, pg. 194).

As the word “cycle” suggests, the learner will traverse this cycle several times in a learning situation. Kolb explains, “Because learning occurs in a cycle, the phases of learning occur time after time. You probably will find that you repeat the cycle several times as you encounter new experiences and revisit old ones.” (Kolb, 1999, pg. 17) Kolb also explains that the learning process takes place between two polar opposite views, as seen in Figure 2, how we perceive and how we process new information.



Continua—
feeling – thinking—watching – doing from “Self-Scoring Inventory and Interpretations: Revised Scoring,” by Kolb, David, A, Boston, Massachusetts: McBer & Company, 1993, pg. 4.
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Figure 2. The Kolb Cycle of Learning

When perceiving new information, Kolb suggests that the learner may “prefer to sense and ‘feel’ their way [Concrete Experience] while others prefer to ‘think’ their way through [Abstract Conceptualization]” (Kolb, 1986, pg. 13) On the other continuum, while a learner is processing new information they may feel more comfortable to ‘observe’ or ‘watch’ what they are learning [Reflective Observation] versus a learner preferring to “jump right in” and ‘do’ it [Active Experimentation] (Kolb, 1986, pg. 15). Although different learners tend to favor certain poles more than others, in order to be successful, all four poles must be incorporated into their learning experience.

Success in learning requires the ability to navigate each pole in any combination, according to the learning experience (Kolb, 1986, pg. 13). Initially, Kolb believed each learner would begin with concrete experience and follow clockwise. However, he later revised his model to recognize the potential for the learner to enter the learning cycle at different stages⁶, i.e. in active experimentation, while continuing the cycle clockwise.

The learner’s score in the four poles place the learner in one of the Four Quadrants of learning, defining the dominant learning style of the individuals/learner, namely: Accommodator, Diverger, Converger, Assimilator (Kolb, 1993, pg. 5).

The Four Poles of Learning, as defined by Kolb **Concrete Experience, Reflective Observation, Abstract Conceptualization, Active Experimentation**

Concrete Experience: (Feeling) Concrete Experience represents the real and tangible part of learning and is the most subjective of the poles. Learners will rely heavily upon “intuition, specific

⁶ Mick Healey and Alan Jenkins, “Kolb’s Experiential Learning Theory and its Application in Geography in Higher Education,” *Journal of Geography* 99, no. 5 (September/October 2000): 186.

new experiences and sensitivity to feelings and people” in this pole (Kolb, 1986, pg. 28). The five senses, intuition and emotions take center stage.

Reflective Observation: (Watching) The Reflective Observation stage of learning defines learning by “perception, careful observation before making judgments, viewing things from different perspectives and looking inward for the meaning (introversion)” (Kolb, 1986, pg. 28). During this stage, the learner will exhibit the ability to see situations or experiences with several points of view. Also during this stage, the learner will rely on certain characteristics such as: patience, objectivity, and careful judgment but would not necessarily take any action. Learners rely on their own thoughts and feelings in forming opinions (Kolb, 1993, pg. 5).

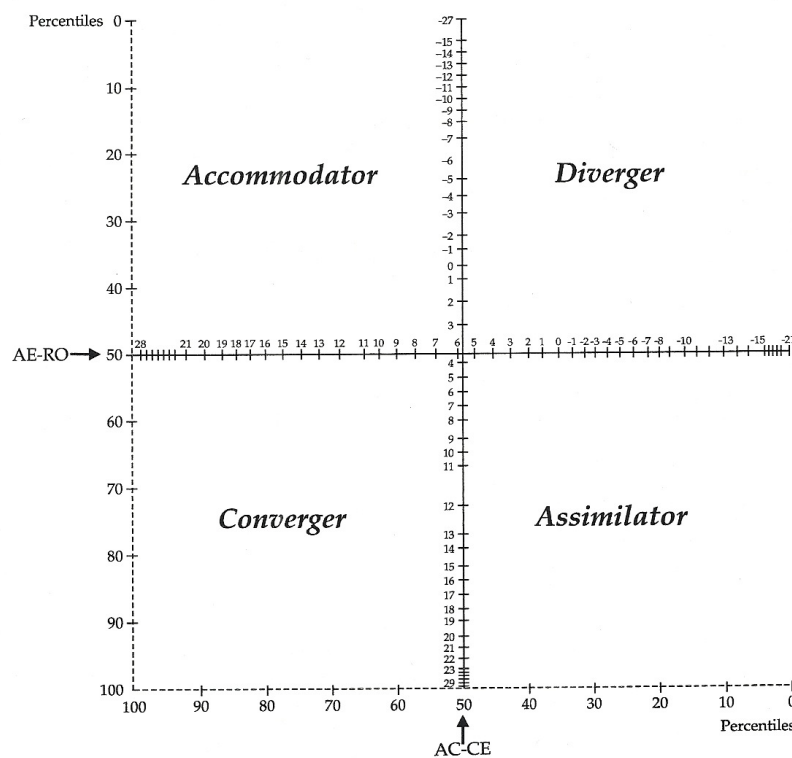
Abstract Conceptualization: (Thinking) Being the polar opposite of concrete experience, abstract conceptualization defines the learner as grasping new information through “symbolic representation, by thinking about, analyzing, or systematically planning” in contrast to feeling and sensing (Kolb, 1986, pg. 13) Ideas and logical thoughts are more prominent in this stage, as opposed to feelings. Formulating plans, developing theories and problem solving are relied heavily upon in this pole (Kolb, 1993, pg. 5).

Active Experimentation: (Doing) As this term suggests, the learner learns by being an active participant through the process of learning a new experience. “Learning in this stage takes an active form-experimenting with influencing or changing situations” (Kolb, 1993, pg. 5). Paraphrased from the Kolb McBer & Company User Guide book, Learners utilizing this pole demonstrate an ability to take risks, get things done and tend to be more extraverted, soliciting responses and influencing society and events (Kolb, 1986, pg. 28).

The Four Learning Styles

As mentioned previously, people perceive new information either by feeling or thinking (CE-AC) and process information either by doing or reflecting (AE-RO) (Smith and Kolb, 1986).

Combining the four poles raw scores and performing an algorithmic equation of the poles ($AC - CE = AC-CE$ and $AE - RO = AE-RO$) results in the preferred learning style. The four learning styles seen in Figure 3 below are: Diverger, Assimilator, Converger and Accommodator. Each quadrant is distinct from one another; each learner possesses qualities and characteristics from each quadrant. The dominant quadrant contains the majority of qualities in learning situations. "...each person's learning style is a combination of the four basic learning modes. Because of this, we are often pulled in several directions in a learning situation. By combining your scores, you can see which of four learning-style types best describes you (Kolb, 1999, pg. 5).



From "Self-Scoring Inventory and Interpretations: Revised Scoring," by Kolb, David, A, Boston, Massachusetts: McBer & Company, 1993, pg. 6.
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Figure 3. Kolb's Four Quadrants

The Four Learning Styles

Converger, Diverger, Assimilator, Accommodator

Converger: The learners in this quadrant demonstrate strong problem solving and decision making skills. Not wishing to deal with feeling as much, they enjoy dealing with “technical tasks, and problems. Learners in this quadrant relate to ideas and theories and finding practical uses for ideas” (Kolb, 1993, pg. 7).

Diverger: Learners in this quadrant prefer reflecting and observing, as opposed to being active and taking action. Learners are able to formulate several different ideas. Kolb specifically mentions this pole is “needed for effectiveness in arts, entertainment, and service careers” (Kolb, 1993, pg. 7).

Assimilator: This learning style is “less interested in people and more concerned with abstract concepts, but less concerned with the practical use of theories” (Kolb, 1986, pg. 16). This learner relies heavily on facts.

Accommodator: “Doing things,” describes this learning style best. They enjoy seeing plans and experiments finished. “The Accommodator tends to be more of a risk-taker than people with the other learning styles” (Kolb, 1986, Pg. 17.)

Being quite complex, thorough and tested, I believe the Kolb LSI offers an extensive view into how learners learn. The Inventory provides useful tools to understand how learners react and deal with new experiences in learning. With the freedom of LSI being a self-administered, self-scored and self-interpreted model, there exist opportunities for adaptations and interpretive perspectives in more than the fields Kolb originally intended: career placement services, sociology and psychological fields. The next section provides an overview of Dr. Laura Border’s adaptations of Kolb’s Learning Style Inventory in teacher instruction and preparation as used in the Graduate Teacher Program at the University of Colorado, Boulder.

BORDER Adaptations Discussion: Applying the Kolb LSI to Teacher Preparation

The Graduate Teacher Program provides graduate teaching assistants effective teaching strategies to enhance their instruction. Border has gradually adapted her use of the Kolb through extensive experience in workshops on applying the Kolb LSI to teaching and learning in the classroom, consulting with individuals through one-on-one sessions, and in videotape consultations with graduate teaching assistants. During videotape pre-consultations, the consultant administers a learning style inventory (the Kolb LSI) and a teaching styles inventory (Chickering, Gamsen, 1985). The learning styles inventory as used by the Graduate Teacher Program serves three main purposes;

“first, the one-on-one interpretation of the results gives the consultant and the teacher an opportunity to get to know each other so the teacher feels at ease with the process. Second, it serves as a useful diagnostic tool to help the teacher understand his/her own learning style and allows the teacher to view his/her own style compared with students in the classroom. Third, it gives the consultant and teacher shared vocabulary to discuss the teacher’s performance” (Border, 1990, pg. 29).

Border offers a new perspective on the Kolb LSI. Without changing any aspect of the Inventory itself or elements in the model, Border provides additions and addendums, making it more accessible for teachers to consider the possibility that they might be teaching to their own learning style in the classroom. Border’s use of Kolb, derived from trying to translate the meaning of the LSI to teachers, results in four adaptations: (1) The learning style of the learner is first defined as the raw score order of the four poles, from highest raw score to the lowest raw score. This is in contrast to Kolb’s definition learning style referring to one of four quadrants. (2) Border adds a nickname to each quadrant, and renames them with an easy to understand image and easy to grasp language. (3) Also, though Kolb assigns ‘doing’ only to the Active Experimentation pole, Border has learned that teachers with high scores on any of the poles define what they are “doing: when they are learning as “doing”, thus, she clarifies what each pole associates with ‘doing’. Last, (4) Border

adds a five-step explanatory breakdown to each of the four poles, representing the process the teacher or learner must go through when focusing on each pole.

Ultimately, through incorporating the Kolb LSI, Border's adaptations and perspective of Kolb, untrained teachers at the University of Colorado Boulder are presented with an effective and reliable tool to use when covering content and when creating student activities. Border explains, "we [GTP] also operate under the supposition that untrained teachers tend to prefer and use their personal learning style to teach in the classroom, ignoring the fact that others do not necessarily process information in the order in which they do" (Border, 1990, pg. 26).

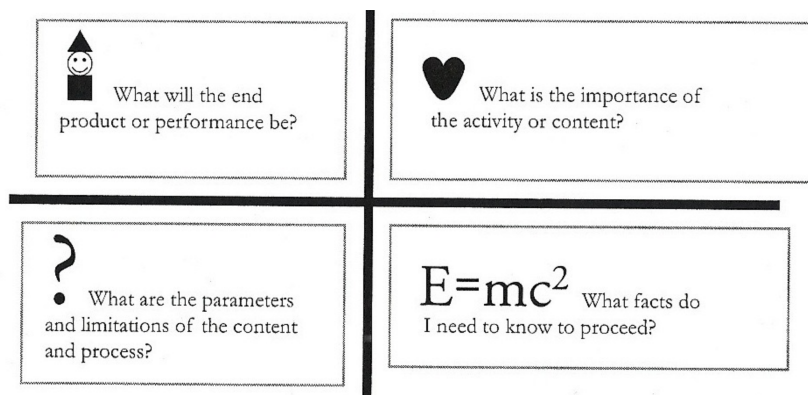
(1) The learning style of the learner is first defined as the raw score order of the four poles, from highest raw score to the lowest raw score.

According to Dr. Border's observations and extensive experience in consultations on videotapes of college classroom teachers, she came to believe that teachers may enter the learning cycle at any point and proceed in any order, provided all four processes eventually take place. Rather than focusing on Kolb's clockwise experiential learning circle, the raw score order provides the learner and teacher with the natural flow of learning for each student. According to this view, one might begin with Abstract Conceptualization, then proceed to Reflective Observation and Active Experimentation before arriving at Concrete Experience. This paradigm shift allows numerous possibilities of order as opposed to solely taking a clockwise direction.

(2) Border adds a nickname to each quadrant, and renames them with an easy to understand image and easy to grasp language.

Because Border found the names originally assigned to Kolb's quadrants were not comprehensible to teachers and also not operable in the classroom, Border gave each quadrant a symbolic name and a question associated with the quadrant, as seen in Figure 4. Border identifies the

four quadrants as Heart (Diverger), Equation (Assimilator), Question Mark (Converger) and Product/Performance (Accommodator).



The Four Quadrants of Kolb's Learning Style, renamed by Border from "The Collaborative Preparing Future Faculty Network: Lead Manual Lead Network, Working Draft 2011" by Border, Laura L.B., Ed. Boulder: University of Colorado 20th Printing, 1990, pg. 34.

Figure 4. Border's Renaming of Kolb's Four Quadrants.

(3) Border redefines 'doing' as a step on each pole.

While Kolb defined Active Experimentation as DOING, Border's incorporates different aspects of 'doing' to her expanded definition of each pole. Border observed that learners view what they are doing when they are learning essentially as 'doing' regardless of the pole, not just for Active Experimentation as Kolb suggests. Teachers define "doing" differently depending on their highest raw score on a pole on the inventory.

In teaching graduate students to teach, Border would say that a teacher who is high on AC would define doing as following/giving directions, accumulating knowledge, organizing, analyzing, and telling; a teacher high on Reflective Observation would define doing as, ponder, observe, reflect, consider, imagine, foretell and suspect; a teacher high on CE would define doing as figuring things out on your own, responding, creating, conversing, and taking action for something important, and a

teacher high on AE would define doing as starting, questioning, manipulating, testing, playing devil's advocate, doubting, rejecting, and being physically active (Border, 2010, pg. 33).

(4) On each pole, Border breaks down the learning process into five specific steps.

It is Important to note Border's fifth step for instructors to follow each of the four poles. When utilizing this chart, teachers are encouraged to touch upon each pole in lesson plans. The corresponding template is the blank version Border offers when planning a lesson plan, see Appendix A page 80. This template requires the teacher to think of certain questions and applicable exercises that will get the student to move the content and the activity through each step. For example, in Reflective Observation, the first step is 'Silent': since this is the natural first step in this pole, in a music lesson, the teacher might allow the student the opportunity to be silent and listen to a recording or an excerpt. The five steps associated with each pole represent the sequential progression learners experience when learning. For example, on Concrete Experience, students experience learning new information in the following progression of steps: Step 1: The student begins with experiencing new information through the aesthetical and sensorial. The teacher can ask questions that will allow students to tell how something makes them feel or see in their mind. Step 2: After the student's aesthetical experience, the second step represents the real or tangible in learning. During this step, learners experience learning through touch, and real application. Step 3: This step emphasizes the emotional and sensing thought when learning. Step 4 highlights the importance for learner's movement and progression through life. This can be represented by improvement from week to week. Border defines "doing" in step five by the learner needing to create, respond to the learned information, while also taking a stand for something important. Each pole, just like concrete experience, contains five specific and defined steps associated with the learning process of the individual.

Border offers practical applications for teachers to revise their lesson plans and better communicate with students on an individual basis. The adaptability of her applications had made the Kolb LSI more accessible to be used in a variety of fields, including music. In addition, the templates and concepts developed by Border, when compared with Kolb's original schema, offers an excellent opportunity for research. The Kolb Inventory by itself is a dynamic resource when used in the classroom and combining Border's perspective provides the instructor with helpful teaching.

CHAPTER 3

RESEARCH PLAN AND PROCEDURES

The theoretical foundation for my research is rooted in the Kolb LSI for student learning and Border's adaptations of Kolb LSI for teacher instruction. I found my musical inspiration from four main pedagogues as related to the four poles of Kolb LSI. From these perspectives, I developed a research project, which examined how matching or countering students raw score order on the Kolb Learning Styles Inventory while teaching with Border's adaptations and templates for trumpet teacher instruction of the LSI would influence student attitude, level of satisfaction and motivation in trumpet instruction at the collegiate level. To that end, I 1) received approval from the Institutional Review Board to conduct research and assigned Protocol #12-0348; 2) administered the Kolb LSI to my students; 3) used Border's template for instruction, created one lesson template over the course of research based on individual students' raw score order on the LSI; 4) taught two lessons in accordance with the student's raw score order; and 5) reversed two lessons, using the reverse student's raw score order, that is, countering their natural order to determine the effect on student attitude and level of satisfaction and motivation. This following chapter outlines the research "Plan and Procedures".

Research question. How will matching or countering students raw score order on the Kolb Learning Styles Inventory while teaching with Border's adaptations and templates for teacher instruction of the LSI impact student attitude, level of satisfaction and motivation in trumpet instruction at the collegiate level?

Research Plan & Procedure

Step One: Receiving Permission to use the Kolb LSI and Approval from the Institutional

Review Board to conduct research. To administer the Kolb LSI in my research, I requested permission for the sole purpose of research and was approved by the HayGroup. In accordance with the agreement for the use of the Learning Style Inventory, the Inventory itself is not included in this document. The Kolb LSI is under copyright and can be purchased at: www.haygroup.com

In order to conduct research with human subjects at the University of Colorado, Boulder, I became certified in human research through the CITI training. I then submitted a research protocol to the Institutional Review Board during the summer of 2012. I submitted a research protocol, (Appendix H), consent form, (Appendix H) and questionnaire (Appendix A). Upon receiving approval and Protocol #12-0348, I began recruiting research participants.

Step Two: Identifying research participants. I recruited for my research project participants from the junior trumpet performance/education majors, consisting of seven junior trumpet performance/education majors at the University of Colorado in Boulder at the College of Music. My main reason for choosing this particular class was due in part to size, offering an even sampling. I also had already established rapport with many of the students in this class. In the fall of 2010, I taught a music fundamentals class, which included several of the students from which the sample was drawn. Participating in my research project was not mandatory nor was it connected to any of the student's grades at the University. The research sessions were additional instruction lessons for the students.

Step Three: Recruitment – Administering the Kolb Learning Style Inventory and collecting raw score orders of participants. During this time, students signed consent forms. Prior to the research lessons, I administered the Kolb Learning Style Inventory to potential participants from the Junior CU Trumpet Studio.⁷ I collected and recorded the raw score pole orders of each student. The student's raw score orders, counter raw score order and Learning style follow:

Student's raw score order:

Student 1: Converger/ Question Mark (?)

Raw Score: AC 46 AE 42 CE 35 RO 29

Counter Raw Score: RO 29 CE 35 AE 42 AC 46

Student 2: Assimilator/ Equation ($E=MC^2$)

Raw Score: AC 39 AE 30 RO 28 CE 23

Counter Raw Score: CE 23 RO 28 AE 30 AC 46

Student 3: Diverger/ Heart (<3)

Raw Score: RO 40 CE 30 AE 29 AC 24

Counter Raw Score: AC 24 AE 29 CE 30 RO 40

Student 4: Diverger/ Heart (<3)

Raw Score: CE 41 RO 28 AE 27 AC 24

Counter Raw Score: AC 24 AE 27 RO 28 CE 41

Student 5: Converger/ Question Mark (?)

Raw Score: AE 42 AC 33 CE 24 RO 20

Counter Raw Score: RO 20 CE 24 AC 33 AE 42

Student 6: Diverger/ Heart (<3)

Raw Score: RO 37 AE 37 AC 24 CE 22

Counter Raw Score: CE 22 AC 24 AE 37 RO 37

Student 7: Assimilator/ Equation ($E=MC^2$)

Raw Score: AC 41 RO 34 AE 32 CE 16

Counter Raw Score: CE 16 AE 32 RO 34 AC 41

⁷ The Kolb LSI was used by permission by the Hay Group. For permission and copyright agreement, the LSI was not included. The LSI can be purchased at: www.haygroup.com.

From the group of students, I chose five different raw score orders to diversify the sample, renaming these participants in alphabetical order.⁸ Two students were not able to participate in the research lessons, due to degree requirements and time commitment.

Official Student Participants for Research Lessons:

Student A: Assimilator/ Equation ($E=MC^2$)

Raw Score: AC 39 AE 30 RO 28 CE 23

Counter Raw Score: CE 23 RO 28 AE 30 AC 39

Student B: Assimilator/ Equation ($E=MC^2$)

Raw Score: AC 41 RO 34 AE 32 CE 16

Counter Raw Score: CE 16 AE 32 RO 34 AC 41

Student C: Diverger/ Heart (<3)

Raw Score: RO 40 CE 30 AE 29 AC 24

Counter Raw Score: AC 24 AE 29 CE 30 RO 40

Student D: Diverger/ Heart (<3)

Raw Score: CE 41 RO 28 AE 27 AC 24

Counter Raw Score: AC 24 AE 27 RO 28 CE 41

Student E: Converger/ Question Mark (?)

Raw Score: AE 42 AC 33 CE 24 RO 20

Counter Raw Score: RO 20 CE 24 AC 33 AE 42

After administrating the Kolb LSI, I discussed the components of the research. During the discussion, I intentionally neglected to tell them which day I would teach according to their raw score order compared to their counter raw score order.

Each student signed a written consent form requesting permission for his or her participation before beginning the lessons; see Appendix H. I did not mention key information regarding teaching to their raw score order or counter raw score. The research lessons were spread out over the course of the fall 2012 semester. Each session was determined according to the

⁸ I administered the Kolb LSI to seven students. Out of that sample, no individuals tested as Accommodator.

participant's available time. At no time did I require a student to cancel a rehearsal or performance in order to participate. If a scheduling conflict did occur, we rescheduled.

Step Four: Managing and Collecting Data. During the course of research, I kept a notebook/researcher log for the purpose of recording the students' progress or discoveries, moods and events. These notes gave a general sense of how well the session went and how engaged the trumpeter was with the music being learned.

Each session was videotaped so I could observe my instructional process, and responses of students to each pole being taught. I have utilized these videos for further conclusions and observations regarding how students improved and performed. All quantitative data (e.g. responses to lesson questionnaires) are stored in Microsoft Excel files. Raw research data, (e.g. individual and collective student data) can be found in Appendix B.

Step Five: Incorporating, to trumpet instruction, three main elements of the Kolb LSI and Border's adaptation of the Kolb LSI for teacher instruction and student learning. I adapted the Kolb LSI and Border's adaptations of the Kolb LSI by 1) viewing the student's raw score as the learning style, which is consistent with Border's adaptations, see page one, 2) incorporating 'doing' into each pole, rather than just active experimentation, which is also consistent with Border's adaptation, see page sixteen and, 3) musically adapting, inspired by key music pedagogues, Border's adaptations of Kolb's four poles (concrete experience, reflective observation, abstract conceptualization and active experimentation) and the five steps of each pole to the context and activities for the trumpet lesson.

Step Six: Create lesson template for research lessons - Adapting Border's template for teacher instruction and definitions of the poles to trumpet music instruction. For sake of consistency during research, I taught using Border's template for instruction as the basis for each lesson see appendix A, page 80. To effectively use this in trumpet lessons, I adapted Border's chart on "Definitions of the Poles for the Kolb LSI" discussed in chapter two, see appendix A, specifically for trumpet/music instruction, see Appendix A page 81.

I discuss the resulting musical adaption in chapter four. Teaching from this template provided an opportunity to navigate any order as it pertains to the student's raw score order compared to the reverse raw score order of the poles. In addition, my teaching in each lesson was consistent. To determine activities and questions for each step of Border's definitions, I took my musical inspiration from both my own methods combined with four main music pedagogues, which represent Kolb's four poles; Arnold Jacobs (CE), Vincent Cichowicz (RO), David Hickman (AC) and Clint "Pops" McLaughlin (AE). For an in-depth examination of the four music pedagogues in relation to the four poles and my musical adaptation of Border's "Definitions of the Poles for the Kolb LSI," please see chapter four.

Step Seven: Lesson Questionnaire created for additional trumpet lessons. I created a five-question questionnaire for participants to fill out after each additional trumpet lesson, which provided valuable feedback and perspective into their learning experience, see Appendix A. The questionnaire also allowed me to measure the student's motivation, frustration level and attitude during each lesson. The box in the upper right hand corner is for my records only. In this box, method includes a place to mark teaching the student according to the raw score order, RSO, counter raw score order, CRSO or the control day, C where neither RSO or CRSO are taught. After each lesson was finished, I rated each student's weekly performance on a scale of one – five, with

one being very weak to five being very strong. This number depends on the ability to adapt to concepts I was requesting along with improvement.

Question number one rates the student's attitude toward my teaching and the lesson by instructing students to check the appropriate facial expression, allowing more than one choice for their answer. Question two sought to collect the students' personal opinion of how well they were able to follow the lesson. My objective for question three was to understand what the students learned in the lesson, along with "why or what they liked to learn" in the lesson. Here, I was hoping for responses alluding to the quality of instruction, that is, did I provide too little information or too much information in the lesson? In question four I asked, "Is there something you feel you could have learned better in this lesson? Why, or why not?" This question was asked in order to get a glimpse of how complete the lesson was. I was also curious to see if specific examples from one or more of the poles resulted in confusion or frustration.

My motivation behind participants filling out these questionnaires after each lesson was to compare the days I taught according to their raw score order to the days I taught according to their counter raw score order. I was checking to see how or if the students' responses to the above-mentioned questions would change. Ultimately, these questionnaires provided helpful insights into their personal experience and cognitive activity during each lesson.

Step Eight: Picking music literature out for students during the research period. The choice of music literature for each student during the research lessons was determined in conjunction with Professor Terry Sawchuk, the main professor of trumpet at the University of Colorado College of Music, Boulder. Literature was chosen based upon each student's ability level, applicability to studies, and recital literature. Following is the breakdown of lesson material covered throughout the semester:

Consistent lesson material throughout the research

Student A: Tomasi “Concerto for Trumpet”

Student B: Prescott “Sonata no. 3”

Student C: Ewazen “Trumpet Sonata”

Lesson material changed:

Student D: Arban “Carnival of Venice”, Bozza “Rustiques”, Arban “Characteristic Study 1”

Student E: Bousquet “Etude no. 3” and Prescott “Sonata no. 3”

The literature itself provided a platform for students to improve in several areas of trumpet playing; musical phrasing, concept of air, tonguing, quality of tone, stylistic nuances, correct genre representation, so on and so forth. I was focused primarily on if the student understood or comprehended what they were doing on the trumpet. Did they learn the trumpet or different aspects of trumpet playing better?

Step Nine: Lesson structure and teaching to the raw score order and counter raw score

order. My research project consisted of six sessions during the semester of 2012. Each lesson ran twenty-six minutes in length (including five for the student to fill out the questionnaire after each lesson). Following is the lesson breakdown:

$$\begin{array}{r} 5 \text{ minutes rapport/get things together} \\ 16 \text{ minutes teaching to either their raw score order/ opposite raw score order} \\ + \quad 5 \text{ minute survey} \\ \hline = \quad 26 \text{ minutes} \end{array}$$

In four of the six sessions, I taught two lessons according to the student’s raw score order (RSO) and two lessons to the student’s counter raw score order (CRSO). I considered the days teaching to the student’s raw score order (RSO) as the independent variable. On the experimental days, I taught using the reverse or counter raw score order (CRSO), these days were the dependent variable.

Using Student A (SA), mentioned earlier in “Student Participants for Research Lessons,” as an example, following is how I taught according to the student’s raw score order (RSO) and the

counter raw score order (CRSO) during lessons. To determine which days I would teach students to their raw score order contrasted with their counter raw score order, I used random sampling before the first and third days of research. For Student A, I drew raw score order (RSO) for the first day of research.

Figure 5 describes how I navigated around the poles when teaching according to the RSO for Student A. I began by incorporating aspects of the highest scored pole, Abstract Conceptualization (AC 39) then taught to the second highest pole score, Active Experimentation (AE 30). After Active Experimentation I taught to the third highest pole, Reflective Observation (RO 28). Lastly, I taught using the five aspects of the student's lowest pole score, Concrete Experience (CE 23).

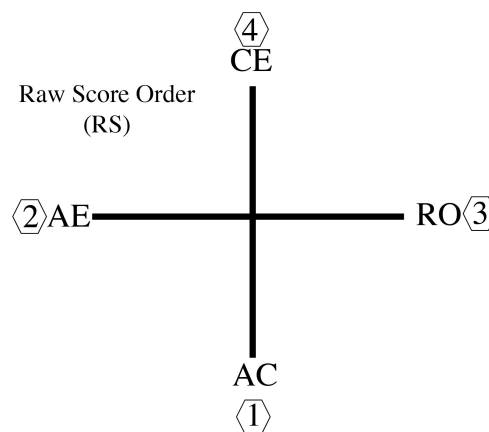


Figure 5. Raw Score Order Student A Lesson One:
AC 39 AE 30 RO 28 CE 23

It is important to note that figure 5 highlights the student's RSO of the poles, not the "five steps" of each pole. But not only did I teach according to the student's RSO, I also incorporated the "five steps" or aspects of each pole, discussed earlier in the musical adaption of Border's Template, "Applying the Poles to a Discipline-Specific Concept & Matching Student Interactions" (Border, 2012).

During the second lesson for SA, I taught to the CRSO. Figure 6 describes the pole flow for the second session. I began teaching to the student's lowest pole score, Concrete Experience (CE 23) then incorporated the five aspects of Reflective Observation (RO 28). The third pole I would teach to is Active Experimentation (AE 30) ending with the five steps in Abstract Conceptualization (AC 39).

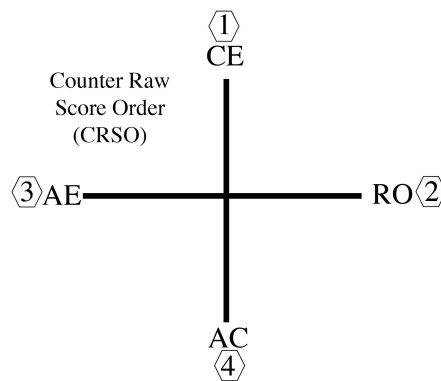


Figure 6. Counter Raw Score Student A Lesson Two:
CE 23 RO 28 AE 30 AC 39

Step Eleven: Measuring the Student's Attitude and Level of Motivation and Satisfaction

toward the learning experience. The data from experimental conditions, teaching to the CRSO of student (two days) were compared to that taken during the control conditions, teaching to the RSO of student (two days). From these two ways of teaching during the additional instructional lessons, I used the dependent variable to determine their level of excitement/frustration, motivation/de-motivation, and satisfaction/dissatisfaction on the different days. Through this, I was also able to see if they might be more or less motivated to practice, if it would affect their attitude, and ultimately if their learning experience would be affected.

Step Twelve: Gathered and Analyzed Research Data. I measured the frequency of the most salient poles and steps from Border's "Definitions of the Poles for the Kolb LSI" from responses on students' questionnaires. Steps receiving five or more marks are considered the most salient or frequent. In addition, I collected averages and trends in student's motivation, attitude and satisfaction level as it compared to teaching to the raw score order or counter raw score order, by inputting data into an excel file. Both individual and group analysis are examined. I assess motivation, satisfaction and attitude by averaging the general trends, both individually and together.

Student's individual analyses, accompanied with questionnaires are found in Appendix C, D, E, F and G.

Table 1 is a breakdown of all the data gathered during the six research lessons for each participant. During the baseline day, research day one, I recorded observations regarding the student's starting ability on material, as well as emotional involvement in the solo. Also on this day, the student and I determined the aspects on trumpet and material, which were most challenging. For example: tonguing, large intervallic leaps, high range issues, low range issues, etc. Also addressed in this initial session was the student's motivation to practice the chosen solo and engagement with the particular piece. During days two, three, four and five depending on the random selection, I taught to the student's raw score order, or counter raw score order. I chose to treat day six as a make up lesson or at my discretion. During the sixth session, I chose to use this day as a make-up lesson, as well as time for discussion, guided by students' comments and conversation.

	Day 1 (Baseline Day)	Day 2	Day 3	Day 4	Day 5	Day 6
SA SB SC SD SE	Most challenging aspect of trumpet literature chosen plus general ability and attitude towards piece.	Taught to RSO or CRSO	Taught to RSO or CRSO	Taught to RSO or CRSO	Taught to RSO or CRSO	At researcher discretion (Make-up Lesson) Discussion

Table 1. Data Gathered from each Research Lesson Participant

Table 2 represents data collected from student lesson questionnaires filled out after each session (Appendix C, D E, F and G). Each student analysis is categorized by: 1) content (C) lesson material, literature, music etudes, etc. for several of the participants, multiple pieces were chosen 2) lesson (L) for each student (SA, SB, SC, SD, SE) I have selected the most salient aspect of the five steps in each pole: CE - 1, 2, 3, 4, or 5, RO – 1, 2, 3, 4, 5 AC – 1, 2, 3, 4, 5 AE – 1, 2, 3, 4, 5; 3) Findings (F) student level of attitude and motivation. I report the rating of performance/attitude I rated for each student (P).

(C)	(L)	(F)	(P)
Content Lesson Material	Lesson Most salient aspects i.e., CE1, CE2,... RO1, RO2... AC1, AC2... AE1, AE2 etc.	Findings Level of Attitude & Motivation See “Kolb LSI Trumpet Lessons Questionnaire” for specific ratings.	Performance Level of improvement 1, 2, 3, 4, 5

Table 2. Data Gathered for Individual Student Analysis.

In addition to the above-mentioned points of data, I also collected the frequency of poles and steps that were most salient or proved to be most efficacious for students throughout the research lessons. Steps receiving more than five tallies were considered chosen as the overall most salient steps.

CHAPTER 4

FOUR BRASS PEDAGOGUES IN RELATION TO THE FOUR POLES OF KOLB AND DEFINITION OF BORDER: JACOBS, CICHOWICZ, HICKMAN AND MCLAUGHLIN

In the following chapter, I relate four brass pedagogues and their methods to the four poles of the Kolb LSI, seen in figure 7. Arnold Jacobs represents concrete experience, Vincent Cichowicz reflective observation, David Hickman abstract conceptualization and Clint “Pops” McLaughlin active experimentation. These pedagogues provided musical inspiration for adapting Border’s “Definitions of the Kolb LSI Poles” to trumpet instruction, which is the template for instruction I used throughout my research lessons, Appendix A, page 79.

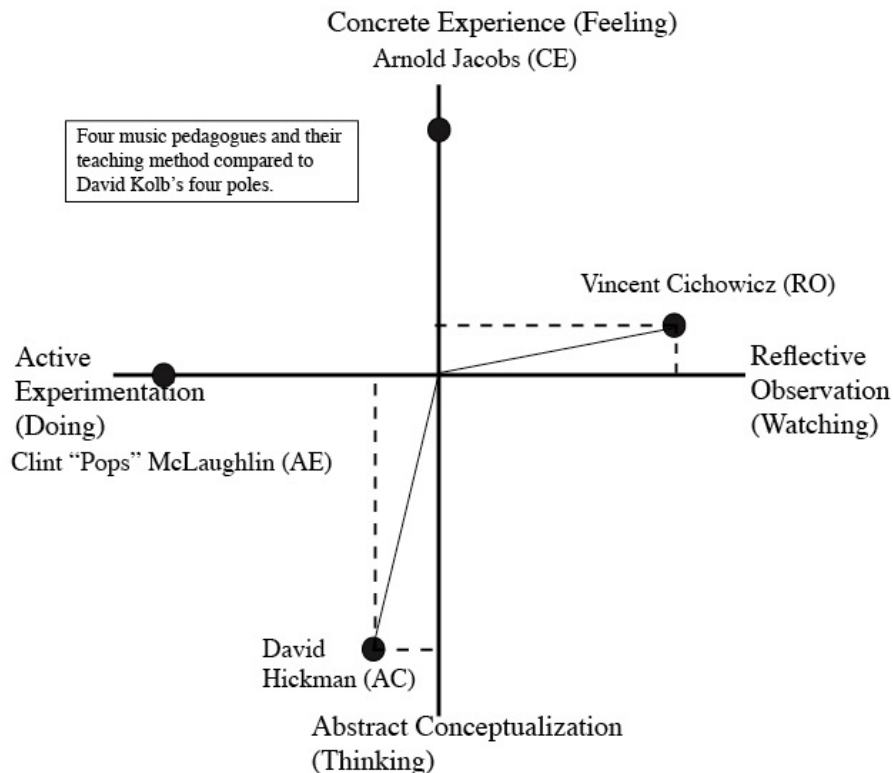


Figure 7. The Methods of Four Brass Pedagogues

Although I assign each pedagogue predominantly to one pole, all four, to some extent incorporate other characteristics of the poles in their pedagogy. For example, Jacobs constantly, “adjusted his teaching to each student’s learning needs and found alternate ways of teaching” (Loubriel, 2011, pg. 45). By doing so, Jacobs recognized each student as an individual learner. Additionally, David Hickman presented information with several modes of presentation, e.g., imagery and the aesthetical aspect of performance in certain lessons versus the abstract perspective. Following is an examination of the four brass pedagogues’ most predominant characteristics, as they relate to the four poles of Kolb and Border’s definitions of the Kolb LSI poles.

CONCRETE EXPERIENCE – Arnold Jacobs
(Kolb: Feeling; Border: Aesthetic)

1. Aesthetic, sensorial
2. Real, tangible
3. Emotional/sensing thought
4. Movement or progression through life
5. Doing means: figuring things out on your own, responding, creating, conversing, and taking action for something important.

When teaching to Concrete Experience, I provide students the opportunity to experience trumpet learning by encouraging them to tap into their emotional response to music and by acknowledging the aesthetic quality in music. A large portion of Arnold Jacob’s pedagogy represents several characteristics concrete experience contains, specifically singing music as a foundation for effective music making and learning. Jacobs emphasized the “aesthetics considerations players strive to express in their artistic message – e.g., beauty of tone, articulation, and phrasing” (Loubriel, 2011, pg. 23). Further identifying with the aesthetic aspect of the pole, Jacobs “based his pedagogical approach on the art form of music (Loubriel 2011, pg. 23). Through Jacob’s approach to teaching, the student is encouraged to: feel, visualize, appreciate the aesthetic aspects of music, imagine and create story lines, draw from exciting life’s experiences, all resulting in an effective musical outcome.

Following is a discussion of my incorporation of Jacob's approach to teaching as it relates to the five definitions, or steps, of Concrete Experience.

Step one of Concrete Experience: Aesthetic, sensorial

In step one of concrete experience, the student experiences learning trumpet with an aesthetic or sensorial perspective. Jacobs recognized the importance in providing musicians an opportunity to explore the beautiful and pleasing qualities music offers. Jacobs expressed, "He did not want his students to focus on a series of scientific procedures as a recipe for playing music. Instead, he wanted his students to send a predetermined message into their instruments" (Loubriel, 2011, pg. 23). I took inspiration from the "predetermined message" students can send their instruments. To create an experience for students to have a picture in their mind to draw inspiration from when playing, I played a recording or a passage in the music on trumpet and asked, "When you hear this piece or portion of piece what do you see in your mind?" These images can serve as part of the message students can incorporate into their interpretation of the music. Acknowledging your own sensing thought and images in mind can aid in providing a clear artistic message into the trumpet.

Step two of Concrete Experience: Real, tangible

In step two, I created a real and tangible experience by having students sing their music while pressing the corresponding valves down. This concept applies to all types of music during the research lessons, e.g., technical passages, lyrical sections, and isolated measures with difficult interval passages. Jacobs encouraged bringing this exercise into each practice session, expressing,

A lot of the singing will start to feed back to your playing all by itself. As it starts to grow, it will become a skill. Keep this training going for now and don't put it away because it might slip in and out for a while. Sing and play all the time! You always must have the voice in your head because that's the signal that goes down the seventh cranial nerve to your lip (Loubriel, 2011, pg. 48).

Incorporating singing into each research lesson allowed students to consistently experience music in a real and tangible way.

Step three of Concrete Experience: Emotional/sensing thought

In step three, I asked, “how do you feel about singing this piece or part?” to facilitate the student’s emotional and sensing thought. I was inspired by Jacobs’ perspective of the emotional and sensing thought of students, directly connected with the images we must portray when performing music. For example, Jacob’s expresses as a musician,

You always have to “ham up” your stories so you become entertaining when you read. That is, dramatic when you been to be dramatic, funny when you need to be funny, and sad when you need to be sad. If I could just get you in one walk of life to be like that, you could then transfer that sense of storytelling to music (Jacobs, 2011, pg. 197).

In order to connect seamlessly with the previous step two of concrete experience, I chose to examine what they felt about singing the part while pressing the corresponding valves. This allowed me to understand their emotional and sensing thought.

Step four of Concrete Experience: Movement or progression through life

Step four, which includes students acknowledging the movement or progression through life, provided me an opportunity to ask students, in reference to last week’s ability on the trumpet, “how have you changed as a trumpet player or how has your trumpet playing changed?” in regards to the piece being worked on. One of the most salient concepts present in Jacob’s pedagogical approach is his “continuous development of his teaching skills and knowledge” (Loubriel, 2011, pg. 36). It seems only natural then, as teachers who are continually growing and learning new information, to encourage students in their pursuit of obtaining knowledge. Jacobs also expressed, “I am still learning as I am teaching you and I am learning more and more” (Loubriel, 2011, pg. 36).

I took my inspiration for this question by incorporating Jacob's perspective on continual improvement. This step gives meaning to what is being learned for the student. Furthermore, from student responses, I understood where each student was coming from, emotionally towards to the music and progress being made, or not. I am able to come up alongside each student and direct or redirect their emotional focus towards learning the trumpet and literature.

Step five of Concrete Experience: Doing means: figuring things out on your own, responding, creating, conversing, and taking action for something important.

Each concept in the fifth step of concrete experience encourages trumpet players to understand why executing musical passages successfully is important. I view this step as more of a personal validation for each student. From the five choices in step five, I chose "taking action for something important" as the basis for the research question. I asked students, "why is this [the improvement on musical piece or passage] important to you?". I found Jacobs' view of the importance of students to repeat positive behavior towards their musical ability as the basis of my question. He expresses that "Some students have had too much grounding over the years in insecure playing. Everything a human being repeats is habit forming – even insecurity. Then the brain will accept insecurity as a norm" (Loubriel, 2011, pg. 102). As a teacher, if I can understand what students believe and why it is important in their music learning or where they are coming from, I can validate, encourage, direct or redirect their understanding and provide other points of views. This question not only provided an effective segue from the previous step four, I also discovered their opinion in regards to the improvement on the literature. I provided the opportunity to hear students verbally respond and converse honestly about their overall feelings.

Important to note, Jacob's pedagogical approach also included aspects, which highlighted the art of "creating" in performance. Jacobs frequently highlighted the importance in making a statement while creating music, saying,

Interpret your music based on a story line. Once the emotions of the story start to unfold, find out what the piece is about. Then your interpretation will make more sense. Even if it doesn't, you are still interpreting your own way following a story line. We are storytellers of sound (Loubriel, 2011 pg. 197).

The whole concept of telling a story identifies with the creative side of performance, as opposed to the opposite on Kolb's continua, analytical.

Overall, I found Jacobs' encouragement for students to, "Put meaning into {their} playing and add a sense of storytelling" (Jacobs, Loubriel, 202) particularly inspiring while teaching in concrete experience. Students are given a platform for infinite opportunities to create, feel and experience music. Ultimately, when incorporating the steps of concrete experience into trumpet instruction, it is through understanding music as a natural progression through life that students are able to begin to "[develop] musicianship, interpretation, and aesthetics [which] sometimes takes the experience of being on stage while reading many types of "stories" to an audience" (Loubriel, 2011, pg. 197).

Commenting on Jacob's method, Vincent Cichowicz expresses, "I would say Arnold's teaching was definitely different. All you have to do is to go back to some of the trumpet method books of this period and you will find that many are extraordinarily analytical" (Loubriel, 2011, pg. 34). I strove to create an atmosphere for students to express beauty through their instruments and not get bogged down in technical speech, which was Jacob's approach to teaching.

**REFLECTIVE OBSERVATION: Vincent Cichowicz
(Kolb: Watching; Border: Pondering)**

1. Silent
2. Listening or watching
3. Waiting and seeing
4. Hesitating or holding back
5. Doing means: pondering, observing, reflecting, considering, imagining, foretelling, suspecting

As a result of watching students be taught in the reflective observation pole I believe that 90% of the experience is learning by modeling, 10% student performance or “doing”. Students are given the opportunity to watch, listen and ponder as they learn trumpet repertoire. I took particular interest in incorporating Cichowicz’ concept of modeling when doing the research lessons. My overall inspiration stems from Chichowicz belief that each student needs an expert model to have a clear understanding of sound. He says, “[playing] the recordings of those great soloists, [such as Maurice André and Timofei Dockshizer] to ensure that his students had a model to imitate” (Loubriel, 2009, pg. 43). In response to steps one through five of reflective observation, I called on the experts during the lessons, including recordings of Maurice André, Wynton Marsalis, Rafael Méndez and Thomas Stevens. Modeling involves each of the five steps of Border from being silent to observing and suspecting.

Step one of Reflective Observation: Silent

Step two of Reflective Observation: Listening or watching

In steps one and two of reflective observation, taking my cue from the above-mentioned model concept, I encouraged students to “Listen to recording or me play this passage or piece” and “watch or listen to what I play, or is played”. Both steps are directly related to Cichowicz’ incorporation of listening to the experts as sound models.

In addition, for a live model, I also played passages from lesson material. In addition, during certain lessons, I provided reading material regarding description of literature, or composer details.

Step three of Reflective Observation: Waiting and Seeing

Step four of Reflective Observation: Hesitating or holding back

Step three and four are very similar to each other. In step three I encourage student to wait and see by asking student, “Think about what you are hearing or reading but wait to tell me” in order to allow the student the ability to wait and see. In step four, to accommodate student’s tendency in reflective observation to hesitate or hold back, I tell them to “listen carefully, I might just trick you, so don’t answer too quickly.” I played two different recordings of the same piece for student to compare and contrast. This created an opportunity for students to become more discerning listeners. Admittedly, the effect these activities have on students is difficult to detect; students tend to be more introverted when learning in this pole. Reflective observation is summarized by doing one main activity; listening to a recording or reading information on the literature being studied. Chicowicz believed,

The most important thing is that if we don’t know what a good sound sounds like, we will not be able to produce one no matter what instruction we may have and no matter what instruction we may have no matter how accurately a teacher describes that physiology of it (Loubriel, 2009, pg. 42).

With this in mind, my main objective when teaching to reflective observation during the research was growing student’s ability to be discerning listeners; general listening skills, sound quality and differences between performers.

Step five of Reflective Observation: Doing means: pondering, observing, reflecting, considering, imagining, foretelling, suspecting

In step five, I focused on the “observing” part of doing in the lesson. I again incorporated the concept of modeling. Cichowicz believed, “All human beings are born with the ability to imitate” (Loubriel, 2009, pg. 41). This step encourages students to open their ears more than just taking whatever might come out of the bell. They are instead being intentional when listening.

Reflective observation addresses a simplistic, single mindedness when teaching the trumpet and literature. It is very personal, with introverted tendencies for the student. Cichowicz himself “encouraged his students to seek models to imitate since he believed that imitation was one of the most natural ways of learning to play a musical instrument” (Loubriel, 2009, pg. 47). Reflective observation provides this organic platform for students to become a more astute listener and potentially play the instrument with greater ease.

**ABSTRACT CONCEPTUALIZATION: David Hickman
(Kolb: Thinking; Border: Analyzing)**

1. Intellectual, mental
2. Symbolic, intangible
3. Rational thought
4. Visual organization or planning
5. Doing means: following/giving directions, accumulating knowledge, organizing, analyzing, and telling

While teaching in the abstract conceptualization pole, I chose to focus on analyzing the music literature during the research lessons (e.g., articulation styles, composer’s intent, and theoretical elements). I chose this rather than considering the technical aspects of playing the trumpet (e.g., tongue level, lip compression, and jaw position) for purposes of time. During my studies at Arizona State University with Regent’s Trumpet Professor, David Hickman, I experienced learning trumpet in a variety of ways. However, an aspect of Hickman’s teaching particularly helpful

was approaching each piece with an understanding of the composer's intent, stylistic differences between genres and theoretical foundation of the literature. Following is the breakdown of each step according to my perspective of lessons with David Hickman and the relation to the musical adaptation.

Step one of Abstract Conceptualization: Intellectual, mental

To create an opportunity for students to learn their music while having an intellectual perspective, I ask students, "What genre is this etude, solo or study?" This encourages students to think about the actual time period the music is written in. I encouraged the student to either draw from their prior knowledge or make an educated guess from any information the page might provide. From my personal experience, I found it helpful when Professor Hickman directed my thinking towards the time period, whether contemporary, classical or baroque. I understood my approach to Rafael Méndez' "Scherzo in D Minor" must be different from Hummel's "Concerto for Trumpet in E flat". My intention in incorporating this question during each lesson was to address this need for students to be aware of the various genres offered in trumpet literature.

Step two of Abstract Conceptualization: Symbolic, intangible

Step two further develops the concept that every piece requires a different approach as a performer. I address the symbolic and intangible aspect of trumpet literature, which is best categorized as articulation and dynamic markings in music instruction, by asking student, "What do these symbols, articulations etc., mean in this piece?" This encourages students to connect the genre of music to the style of articulation. Throughout the four years of instruction, I learned a substantial amount of trumpet literature. I explored etude books, which included the Charlier etude book, Longinetti Etude book, to the Sachse etude book. The solo literature I learned covered works by

André Jolivet, Hummel, Manfredini, and Rafael Méndez to Allen Vizzutti, to name a few.

Additionally, I learned orchestral excerpts, works and trumpet trio literature. Each solo, excerpt and trio requires a different approach and perception in articulation and dynamics.

Step three of Abstract Conceptualization: Rational thought

Step three creates an opportunity for the student to experience the information thinking rationally. I ask the student, “What is the form of this piece? What is the composer getting at?” This provides a platform for the student to reason through the musical piece with logic and existing knowledge. Having said this, as the teacher this creates the opportunity to discuss both the form of the piece and the composer’s intentions. I recall several lessons where the theoretical aspects of the literature, was the cornerstone of instruction. One specific example was studying the Hummel Concerto and understanding it directly related to my studies in Sonata Form in my theory class. While studying contemporary etudes in the Longinetti book, we discussed post tonal theory concepts such as, tone row and retrograde use of the line. I recall how effective this was in my education to relate what I was learning in theory classes directly to the trumpet literature I was performing.

Step four of Abstract Conceptualization: Visual organization or planning

In step four, student’s experience learning through visual organization or planning. I ask the question, “What is the articulation or extending techniques and how are these techniques supposed to be played?” In addition, I tell the student to, “Mark your part with tricky spots, note combinations, etc.” By combining both requests, the student is able to visually organize or explore what makes the piece challenging. From here, they are able to create a plan for improvement.

Step five of Abstract Conceptualization: Doing means: following/giving directions, accumulating knowledge, organizing, analyzing, and telling

In the final step of Abstract Conceptualization, I chose “accumulating knowledge” for the basis of my question and activity during the research lessons. Throughout the course of my personal studies with Professor Hickman, I was asked to incorporate my knowledge of genre, historical context of piece and theoretical foundation as a means to understand how the piece should be played. To provide this opportunity for the students during research, I request the student to, “Play how you think these marks should be played and tell me what you think.” By asking this question, students demonstrate their ability to accumulate knowledge learned and tell the instructor their thoughts regarding how the music is supposed to be played.

One of the most beneficial aspects of lessons with Hickman was being introduced to the importance of understanding the literature. Realizing the music was not just notes on the page, rather everything about the piece and on the page could inform your performance. Learning the repertoire was more than just the notes. Understanding the historical context of the piece, along with the theory and specific styles of articulation informed my overall performance of the trumpet literature and continues to benefit both my performance and trumpet instruction. It was my hope that the students would experience these benefits while incorporating the elements into the research lessons.

**ACTIVE EXPERIMENTATION: Clint “Pops” McLaughlin
(Kolb: Doing; Border: Questioning)**

1. Verbal
2. Contributing or questioning
3. Jumping in and sparring
4. Trying or experimenting
5. Doing means: starting, questioning, manipulating, testing, playing devil’s advocate, doubting, rejecting, and being physically active

Active Experimentation in music instruction provides a platform for insightful dialogue between student and teacher. This pole primarily focuses on asking and answering questions, experimenting with musical passages and taking musical risks. I found Clint “Pops” McLaughlin to embody key elements of this pole, specifically, the experimenting, verbal and questioning aspects.

Step one of Active Experimentation: Verbal

Step two of Active Experimentation: Contributing or questioning

Step Three of Active Experimentation: Jumping in and sparring

Steps one, two and three in active experimentation each focus on student and teacher communication. I took my inspiration from McLaughlin’s “Ask a Question”

(<http://www.bbtrumpet.com/books.html>) service on his website. He suggests, “At some point we have all had questions. Often we just can’t ask our teachers. I’ve been there. I’ll answer your questions. Simple inexpensive \$10 for my undivided attention”

(<http://www.bbtrumpet.com/books.html>). Although I admire McLaughlin’s entrepreneurial spirit in presenting his expertise as a service, I realized just how important it is to be available for each student and create an atmosphere for discussion, questions, and comments. McLaughlin also encourages people to ask any question on his Facebook.

In abstract conceptualization, the learner begins by verbal, usually asking a question or making a remark. To facilitate this first step I ask student, “What questions/comments do you have about this piece? Or what you heard?” This allows the student the chance to be verbal. This pole

encourages dialogue between the teacher and student rather than one-way teacher to student dialogue. This step also provides a helpful point of departure for effective dialogue to occur.

During step two, I ask students to, “Tell me something I don’t know about this piece or about your trumpet playing in this piece.” This permits students to ask questions they may have or allows them to contribute. Being open ended; it may be intimidating to ask the student to tell you something you don’t know. However, this is the exact dialogue that needs to take place in the music lesson setting. The student may express a frustration or say something about their playing you could only know if they told you. The teacher might just learn something new in the process, I know I did. Step three recognizes the student’s tendency to jump in and spar when learning information. I encourage students to, “Ask me a question or make a comment about the musical piece or playing.” As in step two; the ability to have an open dialogue in student-teacher interactions is valuable and necessary for musical progress.

Step four of Active Experimentation: Trying or experimenting

In Step four, I encourage the student to, “Try X a different way.” As a starting point, I give examples of experimenting: manipulating rhythm, sound, changing articulation, or dynamics. This step encourages students to play more than merely the notes on the page. It also provides effective opportunities for practicing tough passages in music and incorporating musicality. In McLaughlin’s pedagogy, he demonstrates the ability to take exercises and change, manipulate and expand them beyond what they were originally written as. For example, McLaughlin expands the Clarke Technical Studies, saying, “Clarke etudes are too high for middle school players and too low for advanced players. [He] put the studies and etudes in multiple keys so that you could concentrate on the register that YOU need to work” (<http://www.bbtrumpet.com/books.html>). Additionally,

McLaughlin re-wrote a substantial amount of Arban exercises in many keys “so the range extends up an octave higher than in the Old Arban Book” (<http://www.bbtrumpet.com/books.html>).

Step five of Active Experimentation: Doing means: starting, questioning, manipulating, testing, playing devil’s advocate, doubting, rejecting, and being physically active

The final step of active experimentation is similar to steps one, two and three. I ask the student, “What are you unsure about?” Asking this allows the student to play devil’s advocate, express doubt or reject information, (within reason). Each are important aspects of learning, which are all a necessary for students learning experience.

Each step in the poles elicits more information about what student is feeling, thinking, observing and doing. These questions are designed to address the student’s learning needs, and also how to address different concepts in teaching music. Each student comes into college with either an effective way of tonguing, or an ineffective way of tonguing. Ask student how they were initially taught tonguing. Are there any discrepancies in how they were taught compared to how you are teaching tonguing? Allow student to question your perspective of teaching while also contributing how it relates to what they are doing in the lesson. Giving the students the ability to doubt openly can bring freedom and understanding in the lesson.

Each brass pedagogue provides assistance in adapting Border’s “Definitions of the Kolb LSI Poles” to trumpet instruction. Viewing each pedagogue, as they relate to the four poles of learning has made me more self aware of my own teaching. It also has provided an effective platform to understand how key characteristics can relate to a learning model. Viewing these pedagogues in light of my own teaching incorporated during the research lessons provides a valuable connection to the dynamic potential in treating each student as an individual learner within the collegiate trumpet studio. I have gained a working knowledge of each pedagogue as they relate to the four poles.

Furthermore, where I used to get overwhelmed with all the choices each pedagogue offers in their method, I am now able to use these methods more effectively. I can categorize and tailor my instruction while identifying which concept best fits into each pole. The methods and concepts provided an effective point of departure in the research lessons. I am able to navigate the four poles of the Kolb LSI and connect with students' natural learning order, which serves as one of the key perspectives in research lessons.

CHAPTER 5

RESEARCH RESULTS AND IMPLICATIONS

The purpose of my research sought to provide a glimpse into trumpet students' experiences by answering (1) How will matching or countering students raw score order on the Kolb Learning Styles Inventory while teaching with Border's adaptations and templates for teacher instruction of the LSI impact (2)) student attitude, (3) level of satisfaction (4) motivation and (5) student performance rating in trumpet instruction at the collegiate level?

The most interesting result showed that students learned best when 1) teaching students to their two lower poles, 2) Teaching to both concrete experience and active experimentation, which were the most salient poles and lastly, 3) teaching with the seven most frequent steps, which include; RO 5, AE 4, CE 1, CE 2, AC 1, AE 1, AC 4. These steps allowed for improvement in the following five musical areas; 1) visualization 2) technical facilitation 3) practice techniques 4) listening skills - pitch and interval identification/recognition, and 5) verbal communication between student/teacher.

Following is an examination of the results, implications and limitations of the research lessons. The highlighted student examples are a sampling of student responses I have chosen from my individual student analyses, which also include responses from lesson questionnaires. For complete student analyses, see Appendix C, D, E, F and G.

Method (RSO – CRSO) in relation to student Attitude – Satisfaction – Motivation level discussion

The first and second question sought to determine how teaching to trumpet students' reverse raw score order of the Kolb LSI might impact their attitude and satisfaction level towards learning trumpet and their overall lesson experience. However, from gathered data, there appears no significant connection between student attitude and satisfaction level and being taught to the raw score order or reverse raw score order. Students were not impacted in a positive or negative way.

Figure 8 below represents students' collective responses on the lesson questionnaires. For the majority, students chose "excited" and "satisfied", while being taught both to the raw score order and reverse. Although there may appear a slight decrease in satisfaction and attitude level when students were taught in their reverse raw score order, it is only a difference of two responses. The results are consistent from the baseline day, through the four research lessons, to the final day of research. At no time during the lessons, did students feel "sad". Both "confused" and "frustrated" were marked only two times throughout the research.



Figure 8. Student Attitude and Satisfaction Level as it Compares to Teaching to the Raw Score Order (RSO) or Counter Raw Score Order (CRSO).

Students written responses on questionnaires suggest why confused was checked two times and frustrated marked two times. Student B marked frustrated during day three of research. When asked why they marked "frustrated", Student B expressed, "I am frustrated towards how the trumpet playing is personally going, not responding well today". (Appendix D pg. 103) Student B marked being confused on the Baseline Day, writing on the questionnaire, "I am not sure what I need to do yet" (Appendix D, pg. 100).

Student C expressed being frustrated towards a rhythm in Eric Ewazen's "Sonata for Trumpet." When asked on the questionnaire, "Is there something you feel you could have learned

better in this lesson? Why, or why not?” Student C responded by saying, “I’m not sure that there is a better way to teach it, but that rhythm is still frustrating”. The rhythm made Student C very confused, being the reason for marking frustrated (Appendix E, pg. 120). Student C also marked confused on day five of research, expressing, “I was more than a little perplexed by all the Sonata form theory terms” (Appendix E pg. 124).

Important to note are students who checked more than one option on the questionnaires, making the results appear overly positive. Table 3 is the breakdown of students who chose more than one option to represent their overall attitude and satisfaction level after the lessons.

**Students Attitude/Satisfaction Responses on Questionnaires –
More than one response**

Student	Lesson Day	Attitude/level of satisfaction marked
SA (AC 39 AE 30 RO 28 CE 23)	Day 3: Lesson Two 10-19-12 [CRSO]	- Excited - Satisfied
SB (AC 41 RO 34 AE 32 CE 16)	SB: Day 2 – Lesson One 9-28-12 [RSO]	- Satisfied - Frustrated
SC (RO 40 CE 30 AE 29 AC 24)	SC: Day 2 – Lesson One 9-28-12 CRSO	- Excited - Satisfied
	SC: Day 3 – Lesson Two 10-26-12 [RSO]	- Excited - Frustrated
	SC: Day 4 – Lesson Three 11-9-12 [CRSO]	- Excited - Satisfied
	Day 5 – Lesson Four 11-16-12 [RSO]	- Excited - Confused
SD (CE 41 RO 28 AE 27 AC 24)	Student D did not select multiple options for attitude toward lessons	NA
SE (AE 42 AC 33 CE 24 RO 20)	Student E did not select multiple options for attitude	NA

Table 3. Students Who Marked more than One response on Questionnaire Regarding their Attitude and Satisfaction Towards Trumpet Lessons.

Student A and C chose “Excited and Satisfied” a combined total of three times. Student B chose “Satisfied and Frustrated” one time, while Student C chose “Excited and Frustrated” and, “Excited and Confused” once. The double responses significantly affected the comparison from the control day to the four research lessons.

Method vs. Motivation level Discussion

The third question sought to determine how students' motivation level might be affected when being taught either to their raw score order or reverse raw score order. As Figure 9 suggests, the connection between motivation level and the method is loaded towards the positive side.

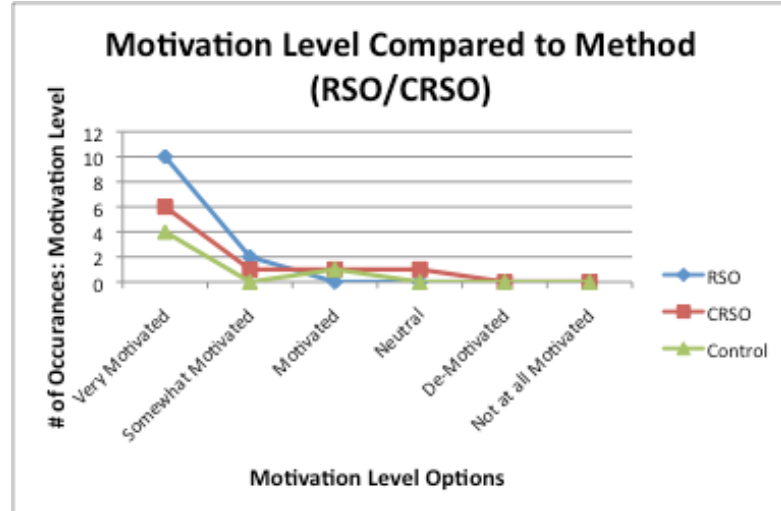


Figure 9. Student Motivation Level as it Compares to Teaching to the Raw Score Order (RSO) or Counter Raw Score Order (CRSO).

Collectively, students marked “Very Motivated” a total of ten times after being taught with their raw score order. Compare this to the six times students marked “Very Motivated” after being taught to their reverse raw score order, making only a difference of four points. “De-motivated” and “Not at all Motivated” was never marked by students. “Neutral” was selected only once throughout the study, by Student D. The questionnaire provides pertinent information highlighting the reasoning behind this response, saying, “It’s hard to say I would have expected to learn much this close to my recital” (Appendix F pg. 133). Although it was a day where they were taught to the raw score order, it may not have been the reason for feeling neutral, rather the recital they were about to present the next day. Aside from these responses students’ motivation level was not significantly altered when being taught either to the raw score order or reverse order.

Method vs. student performance rating discussion:

I hypothesized that students performance rating might be lower during the days they were taught in the opposite order of raw score, however, this was not the case. Rather, scores stayed consistently above a performance rating of four. Figure 10 plots students' performance ratings throughout the lessons.

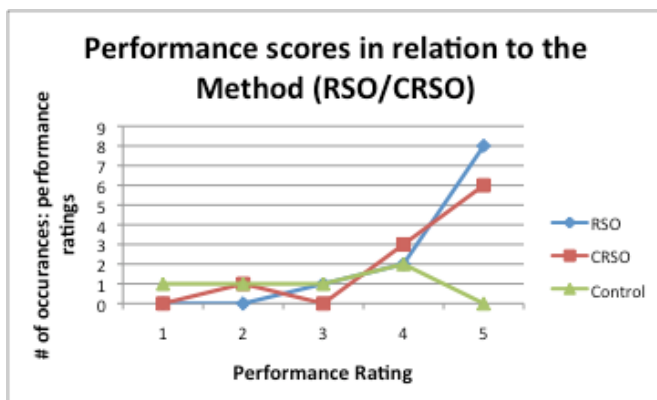


Figure 10. Student Performance Level as it Compares to Teaching to the Raw Score Order (RSO) or Counter Raw Score Order (CRSO).

Important to note are the times performance ratings below a three were given. Overall, of the thirty lessons, a performance rating of three or lower was given a total of five times. Student E received a performance rating of one since neglecting to bring trumpet due to unavoidable circumstances (Appendix G pg. 141).

Student C received a performance rating of two during the control day (baseline day) of research due to the level of performance. Having just received the music, Student C had not had an opportunity to run through portions of Eric Ewazen's "Sonata for Trumpet." The performance level mirrored this rating (Appendix E pg. 114).

Student D was given a performance rating of two during day three of research, due to the perceived resistance given when teaching. Although this occurred during the counter raw score

order day, Student D was one day away from a recital, having a significant impact on performance (Appendix F pg. 133).

Student B received a performance rating of three both research day one and two. This performance rating reflected the student's ability to adapt to the concepts being taught, as well as, overall performance. During lesson one, I gave SB a three in performance, mirroring level of understanding and ability on solo. In addition I took into account SB's attitude towards the music, which was undetermined having not worked on it extensively (Appendix D pg. 100). On day two, Student B took a benedryll before the lesson, making it more difficult to give complete attention (Appendix D pg. 102).

Teaching to the students lowest two scoring poles created the most “ah-ha” learning moments in lessons

Students experienced “ah-ha” learning moments when being taught to their own two lower poles. Student A's two lower scoring poles are reflective observation (28) and concrete experience (23). Student A sang a select passage of Tomasi's “Trumpet Concerto” while pressing the corresponding valves down, an activity associated with step two of concrete experience. During the fifth day of research, after being asked on the questionnaire, “How do you feel about singing and pressing corresponding valves in the passages of the Tomasi “Trumpet Concerto?” Student A responded by saying “I didn't realize how much I didn't hear the pitches” (Appendix C pg. 95). When taught to concrete experience, Student A expressed a new awareness in the ability to recognize pitches.

During the sixth day of research, Student A shared in discussion, “I identified the most with moving my thinking to musicality, I learned that I can use my musical ear much more in conjunction with technical playing.” Student A also said, “I felt I learned something about how I attempt trumpet. I tend to attack it very mechanically” (Appendix C pg. 98). Both comments highlight

characteristics of both reflective observation and concrete experience, which are Student A's lowest scoring poles.

Student B's lowest two poles are concrete experience (16) and active experimentation (32). Only two points separate active experimentation from reflective observation, which is the second highest scoring pole. With this in mind, the clearest example of Student B experiencing the "ah-ha" moments is when taught to concrete experience. During the third day of research, I played a portion of John Prescott's' first movement of "Sonata no. 3 for Trumpet" then asked Student B, "What pictures do you see in your mind?" Student B responded by saying, "because of the random and chaotic nature of the music I saw random numbers. I guess I have never thought of what I see in my mind when I am playing". SB continues to discuss which numbers being seen in mind, using pie as example: 3.14159265358979. (Appendix D pg. 103) This experience offered a new way for the student to learn trumpet repertoire.

Student C's two lowest scoring poles are active experimentation (29) and Abstract Conceptualization (24). One of the clearest demonstrations of an "ah-ha" moment was on the fifth day of research when Student C was asked on the questionnaire, "What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn" Student C responded by saying, "I learned that when the composer titles it a Sonata, then that means it is actually a sonata, along with all the terms. I've never used those terms used outside of Mozart and Beethoven" (Appendix E pg. 123). Contributing to Student C's learning experience in the two lower poles, on the last day of research, Student C mentions, "I guess that doing your theory homework really does help!" (Appendix E pg. 125)

Student D, whose lower two poles are active experimentation (27) and abstract conceptualization (24) benefitted from being taught to active experimentation while working out the trills found in measures five and six of the Arban Characteristics #1 Study. When asked to "try (x) a

different way” from step four of Active Experimentation, at first, Student D presented difficulty in understanding how to experiment, with guided help, I encouraged SD to experiment the following ways:

1. Hold the half note out without the trill and only incorporate the turn with the metronome.
2. The sixteenth turn was not clean so then we isolated the turn to make each note speak. First we tongued it, and then slurred it.
3. We then experimented with only trilling the half note, but not turning the last part.



Selection of “Characteristic Study #1” from measure five through six
by Jean-Baptiste Arban that Student D
chose three different ways to Experiment with.

Figure 11. Arban’s Characteristic Study #1 Measures Five Through Seven

After these experiments, the results were excellent and timing was perfect. When asked on the questionnaire, “How well were you able to follow this lesson today? Please explain in detail” Student D expressed “[I] felt like I actually improved on the study this time, especially on the trills” (Appendix F pg. 138).

Student E’s lowest scoring poles are reflective observation (20) and concrete experience (24). In research day five Student E articulated how being taught to concrete experience benefitted the overall musical line. In response to being asked on the questionnaire, “What did you learn today? Please explain in some detail. If you don’t feel you learned anything, why? Also please explain why or what you have liked to learn” Student E wrote, “I learned how to apply an image and turn it into a musical statement. Visualizing the “Call to arms” was very effective” (Appendix G pg. 151). In this comment, Student E was referencing step one in concrete experience by acknowledging the images

seen when listening to a passage. During the final day of research, Student E shared, “You did a great job of getting me to understand musical concepts through methods of visualizing, singing and playing” (Appendix G pg. 153). Each activity – visualizing, singing and playing – which are all characteristics consistent in Concrete Experience, Student E’s lowest scoring pole.

During the second day of research, Student E benefitted from being taught to reflective observation, specifically in step four. Student E demonstrated an acute ability to discern different styles I performed of Bousquet’s “Etude # 3.” I asked Student E to “listen carefully to what I played because I might just trick them.” I used this as an opportunity to play different articulations in addition to stylistic markings. The first time I played it more separated, the second time, was more connected and the last time I didn’t play the correct articulation. For this example, I played from the beginning to measure eighth and switched up the articulation, tonguing where slurs are indicated and placing more rubato towards the end of the phrase in measure four.



Figure 12. Highlighted Fourth Patterns from Selection of Bousquet’s “Etude #3”.

From this playing example, Student E observed the changing in the articulation and added rubato. Student E became more aware of the different interpretations and also made mention of the light tonguing style. Student E also alludes to benefiting from being taught to reflective observation when asked during lesson three, “Is there something you feel you could have learned better in this lesson?” SE replied, “No. Sarah pushed my musical ability/interpretations and I feel as though I am

better already.” This answer highlighted the benefits student experienced when taught to the lower pole of concrete experience and reflective Observation (Appendix G page 149).

**Two most frequent /salient poles in trumpet instruction:
Concrete Experience and Active Experimentation**

The two most frequent poles occurring during research lessons were active experimentation and concrete experience. Active experimentation occurred as the most salient pole a total of twenty-six times, while concrete experience twenty-five times, abstract conceptualization twenty-two times, and reflective observation nineteen times (Appendix B pg 82). Both reflective observation and abstract conceptualization are close behind. Only seven points separate the highest and lowest poles.

In trumpet instruction, concrete experience provides students the opportunity to learn trumpet by drawing upon images seen in their minds when listening to solo repertoire. In addition, to provide a tangible experience, they were challenged to sing and press the corresponding valves of tricky spots in the music. When students are taught in the active experimentation pole, they are encouraged to make mistakes and take musical risks by trying a passage in a new and different way.

**Most salient aspects/steps in trumpet instruction:
RO 5, AE 4, CE 1, CE 2, AC 1, AE 1, AC 4**

Certain steps of Border’s “Definitions of the Poles for the Kolb LSI” resonated with students more than others. Table 4 shows those steps of the four poles that were most frequent in music instruction, (From appendix B pg. 82). The seven most frequent steps include: RO 5, AE 4, CE 1, CE 2, AC 1, AE 1, AC 4.

	CE 1	CE 2	RO 5	AC 1	AC 4	AE 1	AE 4
SA	II	I	III	I	I	I	III
SB	III	II	II	I	II	II	II
SC		III	I	II	I	II	I
SD	I	II	III	II	I	II	III
SE	III	II	III	II		I	II
Sub Total	10	10	12	8	5	8	11

Table 4. The Most Salient Aspects/Steps in Trumpet Instruction.
The highlighted parts represent the student's lower two poles.

As this chart shows, step five in reflective observation, which asks student to “Observe what is being played” gathered the most student response, occurring twelve times throughout the student analysis. Step four of active experimentation, which requires student to, “Try (x) a different way” is a close second, occurring eleven times. Concrete Experience step one, which asks student to acknowledge the images they see in their mind when listening to the music, and step two, which asks students to “Please sing and press the corresponding valves down” occurred ten times. Step one of abstract conceptualization, which asks student, “What genre is this etude, solo or study?” occurred eight. Step one of active experimentation occurred eight as well, asking student, “What questions/comments do you have about this piece? Or what you heard?” Occurring five times throughout the study was step four in abstract conceptualization, which asks student “What is the articulation or extending techniques and how are these techniques supposed to be played?”

Important to note are the aspects of the four poles not receiving any marks. Step five in both concrete experience and active experimentation did not receive marks throughout the research lessons. When taught to the fifth step of concrete experience, students were asked, “Why is this [the improvement on musical piece or passage] important to you?” When taught to the fifth step of active experimentation, students were asked, “What are you unsure about?” These steps did not

provide a significant response from students for it to be tallied. Although student's trumpet playing and musical awareness may have indeed improved when incorporating these steps into lessons, other steps provided more concrete improvement visible by either my observation or student response.

Trumpet Improvement and Music Awareness

As a result of the seven most salient aspects of the four poles, students' trumpet improvement and musical awareness can be categorized into five main sections, including:

1. Visualization
2. Technical facilitation
3. Practice techniques
4. Listening skills - pitch and interval identification/recognition,
5. Verbal communication between student/teacher and musicianship.

Each category represents students increased awareness on trumpet and ability in becoming a more discerning musician. In addition, each example highlights the benefits and effectiveness that each aspect can contribute to trumpet learning and education. Following are the five categories of musical improvement from the seven steps, beginning with visualization.

Visualization: CE 1: (Aesthetic, sensorial) - When you hear this piece or portion of piece what do you see in your mind?

Students demonstrated marked improvement in imagery, visualization and overall sensorial and aesthetic aspects of trumpet playing. After listening to either myself, or recording of lesson repertoire, students provided intricate and detailed stories and images. For example, when Student B was asked, "When you hear [measure 158-end from John Prescotts' Sonata no. 3 for Trumpet: Movement I] what do you see in your mind?" Student B responded with, "because of the random and chaotic nature of the music I saw random numbers. I guess I have never thought of what I see

in my mind when I am playing”. Student B continues to discuss which numbers are seen in the mind, using pie as an example: 3.14159265358979 (Appendix D pg. 103). Furthermore, when students were asked to play these images, the musical line contained more flow and air support.

Student B also discussed another vivid image after I played the first page of Prescott “Sonata no. 3” from beginning to measure 40 for Student B, I asked, “What pictures did you see in your mind?” Student B shared images of people playing in studio class although not sure why. In other parts of the first page, for example in measure 27, Student B was reminded of “Back to the Future” and proceeded to play an excerpt from the main theme (Appendix D pg.105).

Student D responded strongly to several Concrete Experience steps when learning Eugene Bozza’s “Rustiques,” from the beginning to the A Tempo. Student D expressed seeing “something that is solid. I guess I would explain it in motions relating colors. The beginning is like regal but sensitive and beautiful representing a dark bluish purple. All the fast accented notes are bright red, orange colors” (Appendix F pg. 129). The first step demonstrated just how important the aesthetical aspects are when learning music.

While working with Student E on the Bousquet “Etude #3,” in the first step of Concrete Experience, Student E expressed “[Seeing] two people on a trapeze, one initially in the beginning, then in measure six another person joined. The second half of measure seven were the trapeze artists doing a flip off of the trapeze” (Appendix G pg. 146). Each lesson mentioned-above allowed students to experience learning trumpet repertoire with an artistic, visual and sensorial perspective.

Technical Facilitation

AC 1 & 4: (Intellectual, mental, Visual organization or planning) - “What genre is this etude”, solo or study? And “What is the articulation or extending techniques and how are these techniques supposed to be played?”

Student B demonstrated interest in step four of abstract conceptualization when learning John Prescott’s “Sonata no. 3 for Trumpet,” Movement I from the beginning to measure 18. After being asked, “What is the articulation or extending techniques and how are these techniques

supposed to be played,” Student B expressed not understanding how to produce a beautiful tone after articulating. As a result of this response the majority of the time when teaching in this step was spent on producing a beautiful tone after articulating the tone. I used the example of a sprinkler, which has constant water flow with slight separation as it rotates. The large intervallic leaps in the Prescott in this solo presents challenges in articulation consistency. We explored how to produce a constant airflow when tonguing by playing a long tone and while maintaining the air speed creating a slight break in airflow by incorporating the tongue. This all made it possible to perform the tonguing more successful (Appendix D pg. 105).

When asked, “What is the articulation or extending techniques and how are these techniques supposed to be played?” Student C responded by saying, “Follow them rigorously...usually with the newer sheet music, they are usually pretty good about writing down every single little thing that is supposed to be played.” From here, Student C formulated theories from looking at the music, regarding how certain passages should be played with this in mind. Student C expressed, “So far as tonguing goes, I have to approach it differently. Measure 7, is where I want to pop the E flat, it is a lead into the next phrase and acts as somewhat a mini climax. Crescendos and decrescendos are very important in this music. It leads to more expression and a flowing feeling. How the articulation is written in measure 14, I have a feeling they don’t want to have an impact.” By asking the interpretation on articulation, I was able to come up alongside Student C and understand what perspective might need to be agreed with or changed. From this, it became clear Student C was approaching this solo with more of a jazz interpretation (Appendix E pg. 115).

Practice techniques:

AE 4: (Doing means: starting, questioning, manipulating, testing, playing devil’s advocate, doubting, rejecting, and being physically active.) - Try (X) a different way.

Becoming a discerning musician requires, in addition to interpreting, visualizing and expressing, the ability to practice efficiently. Active Experimentation provided such an avenue for

the trumpet student by encouraging them to try something different and not be concerned “being right”, rather just doing it.

When asked to try section-number three through four of Henri Tomasi’s Movement I, Student A chose to experiment three different ways. 1.) Playing it forte with thick accented notes 2.) Legato and slurred at a mf dynamic and 3.) Play legato and mixed articulation while playing piano dynamic. After experimenting SA did a run through of section 3 – 4 as written, demonstrating the ability to gain greater control of musicality to achieve the desired musical outcome (Appendix C pg. 93).

Student B experimented with the style of John Prescott’s “Sonata no. 3” for Trumpet, Movement I by altering the style. First, by making the articulation very legato, like a cello. Secondly Student B, using the cello as inspiration, played both with a détaché bow and legato bow. This resulted in less notes being missed and a more constant, uninterrupted air stream. Two issues Student B had been experiencing prior to the lesson (Appendix D pg. 101).

Listening Skills: pitch and interval identification/recognition and observations:

CE 2: (Real, tangible) - Please sing and press the corresponding valves to your music

RO 5: (Doing means pondering, observing, reflecting, considering, imagining, foretelling suspecting)

- Observe what is being played

As a result of being taught in the Concrete Experience step two and Reflective Observation Step five, student’s demonstrated increased improvement in pitch and interval identification and ability to recognize different interpretations of the music.

Step two of Concrete Experience capitalizes on this very concept and proved very effective for several students. Students A and C both clearly demonstrated improvement in pitch identification and intervallic leaps in demanding trumpet repertoire. Singing and pushing the corresponding valve combinations at the same time is a popular technique encouraged by not just trumpet pedagogues, but instrumentalists in general.

Student A demonstrated marked improvement when working on Tomasis' "Concerto for Trumpet," Movement I from the beginning – measure eight. This solo consists of quick and awkward intervallic leaps. The passages contain mixed intervals ranging from perfect fifths, major seconds, perfect fourths, and octaves-leaps expanding beyond octave leaps. As one might suspect, singing these passages can be as challenging as playing them.

Student A sang and pressed the corresponding valves down while looking the music from the beginning of movement I to measure marking number one, as well as, measure marking three to four. I encouraged Student A to take a slow tempo in order to accommodate the larger leaps, while I provided a reference pitch. During the first run through, Student A demonstrated difficulty finding the pitches. However after two more times of slower tempos, Student A performed the passages with more accuracy. After three times of singing and pressing the corresponding valves slowly, we picked the tempo up, where Student A executed the passage with marked improvement and clarity. Student A's performance was audibly more informed by the singing provided in step two of Concrete Experience (Appendix C pgs. 87-88).

During research lesson one, day two, Student C clearly demonstrated marked improvement in pitch and interval identification, when taught to the second step in Concrete Experience. I gave Student C reference pitches for measure one to twenty-three in Eric Ewazen's "Sonata for Trumpet," from movement I. Student C struggled with singing and pressing the corresponding valves down during the opening of the solo, having difficulty keeping on pitch, ending a minor third off from where the pitch should have been. As a result, Student C was able to hear and realize just how much more was needed in pitch and interval identification not only in playing. Pitch identification became the most salient aspect from question number two and allowed the experience to be real and tangible at the same time (Appendix E pg. 115).

When students were presented with the aspects in the fifth step of Reflective Observation, they demonstrated the ability to recognize different interpretations of the music and subtle nuances. Important to note is the benefits in guided listening. The possibilities in guiding student's listening are abounding. I guided students to listen for different interpretations, tone quality and musical line, to name a few.

Student B observed the difference between my playing examples, realizing they were placing the accents in the incorrect place. Instead of playing accents where composer placed them, Student B placed them where they naturally wanted to go or was easier to play (Appendix D pg. 109 and 111).

Student C expressed in response to being asked, "When asked, "What did you observe" after listening to a recording of Ray Mase performing Ewazen's "Sonata for Trumpet," SC expressed:

"I love the sound of the recording, I like what he did in the double tonguing sections. I also like the different pattern of accents. None of the subtle nuances are written in the part. The first couple he would bring out, the next couple would be slightly softer."

Student C demonstrated the ability to identify the difference between Ray Mase's sound and musical nuances, (dynamics, crescendos and decrescendos, articulation, phrases, etc.) by listening to the recording, then playing by self. While teaching in the Reflective Observation pole, SC was able to identify the difference between what was being heard as opposed to what was written on the page. When Student C noted that what was heard was not written in the part, the importance in doubting was highlighted. The student will have the opportunity to bring more interpretation and musicality than what is merely written on the page (Appendix E pg. 118).

Student E observed the difference between my accents in the beginning of John Prescott's "Sonata no. 3" for Trumpet, as well as the difference between the lyrical and more mechanical aspects of phrase. For example, from measures eleven to fifteen the slur marks represent a lyrical side whereas the tongued, more technical. I played through the etude, with specific emphasis on

providing the eighth notes with what I like to call, “breadth”. I directed Student E’s listening to these eighth notes and then asked Student E to play through the etude with everything discussed in the lesson including, form, trilling techniques, images drawn upon along with singing through the trumpet. Taught at the end of the lesson, Reflective Observation provided Student E an opportunity to bring everything together. Student E performed the etude with a broader and more sophisticated handle of the style and technique required to play the Bousquet “Etude #3.” This particular attention to details in lessons can transfer not only to Student E’s individual practice time, but also during ensemble playing (Appendix G pg. 146).

We discussed that accents in this piece must present more of a round and full sound rather than attack, with no substance. It must be less harsh. Also attributing to the tone being less harsh was instructing SE to “warm the air”, which made the tone present and darker and slurs more lyrical. After viewing the questionnaire filled out I gathered Student E benefited by this guided listening expressing, “I learned how to mix interpretations” (Appendix G pg. 148).

Step five of Reflective Observation provided SE an opportunity to reflect on what solos Prescott drew from. I played both the Kennan Sonata for trumpet and Eric Ewazen’s Trumpet Sonata. Although we covered this information verbally in lesson three, SE reflected on both the verbal instruction from lesson three to the actual recordings during this lesson. This repetition during lessons is also a critical aspect of student’s learning. Following up verbal instruction with sound recordings to back this information up helped solidify and allow the information to become common knowledge to SE (Appendix G pg.151).

Verbal expression and communication during lessons/opinions

AE 1: (Verbal) - What questions/comments do you have about this piece? Or what you heard?

Active Experimentation, 1: Verbal communication can be an avenue for reporting improvement, establishing understanding, as well as, provide a platform for constructive criticism,

instruction and student/teacher feedback. It is important to establish the framework for open communication early in the lesson process so that both teacher and student are comfortable visiting about the various characteristics regarding playing trumpet. The active experimentation of the student's primary responses indicated this as an important piece regarding the rudiments in trumpet/music comprehension. In examining the lessons in post video observation, I determined that the most salient method of communication was found in step one of Active Experimentation. Of the 21 lessons observed, step one of Active Experimentation occurred as the most salient step a total of eight times.

Discussion/implications

While minimal connections existed between student's attitude, satisfaction and motivation level compared to the method (RSO/CRSO), data suggests students benefitted significantly when taught to their lower two poles of the Kolb LSI. In music instruction, concrete experience and active experimentation were the most efficacious when learning trumpet literature and concepts. Furthermore, students demonstrated marked musical improvement when presented with the activities and concepts in seven steps, which were: CE 1, CE 2, RO 5, AC 1, AC 4, AE 1, and AE 4. Because of this, students improved in their visualizations, technical facilitation, practice techniques, listening skills, which include pitch and interval identification and recognition, as well as verbal communication between student and teacher.

Important to keep in mind when analyzing information is the concept that no matter what we do as teachers, student's satisfaction and attitude level may be affected. They themselves or the teacher could be in a bad mood, also effecting attitude.

Overall, students demonstrated marked improvement and remarkable response when being taught with my musical adaptations of Border's templates for teacher instruction of the Kolb LSI.

Within the lesson the trumpet learner benefitted from feeling, thinking, observing and doing resulting in the improvement of: sound of tone, technical ability and musicality and form of literature to name a few. Through a very meticulous lesson template, learners were encouraged to explore thinking, reflecting, doing and feeling into their trumpet playing.

One reason students' attitude, satisfaction, motivation and performance level may not have been significantly affected when taught to either the raw score order or reverse raw score order, may lie in the participants themselves. Providing insight into this positive response, Student B expressed, "I am not sure why there is the option to be "de-motivated" or "not at all motivated", as a music student being motivated is our responsibility or we don't get better. We should always be at-least a three on the motivation scale" (Appendix D pg.101). This may explain the seemingly over positive response of students throughout the lessons. As I witnessed throughout the study, the samplings of junior trumpet performance majors are already motivated (generally). they may naturally take the best of what they can from the lesson and learn. Similar to attitude and satisfaction level, motivation can also be effected by mood, expectations of student's and the pressure they themselves apply.

My research suggests the positive affect from challenging students on their lower poles. I believe focusing on students lower scoring poles created more learning moments because it challenged them and made them feel a relative sense of discomfort when accommodating new information. This may suggest when we are uncomfortable (within reason) we have the ability to learn more. It also allowed me to present different concepts on trumpet than students might have been used to. My data suggest that by challenging students to learn in their lower scoring poles, they will become well rounded as a learner. I suggest from both student's responses and my own observation, that in the applied trumpet studio, placing more emphasis on student's weaker poles may provide an atmosphere of more musical awareness, and improvement on trumpet.

The first step in Concrete Experience, according to Border suggests students, when learning new information, will experience learning in an aesthetical and sensorial activity. Incorporating the first step of Concrete Experience offered students the opportunity for student's to examine the aesthetical and tangible aspects of playing trumpet. I encouraged students to pay attention specifically to what they saw in their mind when listening to the music being played. This concept offered students a platform to explore their imagination and ability to associate their feeling to their trumpet playing. In addition, this step also provides the instructor a rare glimpse inside what students feel when hearing and playing trumpet and provide elaborate, precise images and made-up stories they hear while listening to their lesson material. In with this, students demonstrated an increased ability to create vivid images and stories when listening to musical passages. Specifically, we focused on the importance in incorporating acknowledging the images they saw while listening to or playing a musical phrase. To many students, this concept was uncomfortable and not as familiar to them.

When incorporating step one and four in Abstract Conceptualization, students experienced information by being encouraged to think about the literature in context of historical relevance, and composer's intent. The abstract conceptualization aspects in the pole also encouraged students to execute clean, precise articulation, in addition to diversity in tonguing appropriate to genre of piece and composers intentions.

The fourth step in Active Experimentation encouraged students to view difficult passages in the music a multitude of ways. Students experimented with lesson repertoire by manipulating rhythms, changing articulation, dynamics and tempo, to name a few, when asked to "try (X) a different way". By doing so, students understood what might be catching them up, or making the passage difficult for them. In addition, students demonstrated versatility in playing one passage a number of ways.

I propose that the minimum frustration students demonstrated and that I witnessed could be attributed to student's comfort level when being asked to experience instruction and information differently. I also believe stress created by everyday life and responsibilities of being an undergraduate student can also attribute to this friction. For example, Student D demonstrated resistance by saying, "I feel I could have had a more open mind and accepted what was presented to me rather than fighting with the thoughts in my own head" (Appendix F pg. 132). Although Student D was taught to the counter raw score order, I believe other factors contributed, including stress caused by an upcoming recital.

It is important and beneficial to encourage student to "approach music from different angles than [they have ever] before" (Appendix G 143 and 145) this too can cause friction but increase student learning on the trumpet. When incorporating these concepts into the instruction time, a dynamic trumpet-learning environment was created.

Limitations of the Study

An obvious limitation of my research is both the size and student population of trumpet lessons. It is difficult to generalize or make concrete assumptions based upon five trumpet students who also are all junior undergraduate performance and education majors. I cannot suggest all trumpet players would react the same way as in my research lessons. I can, however, say my research results provide a unique glimpse into the trumpet students' experience when learning the trumpet. It is my hope these results might encourage instructors to view students as individual learners, requiring specific learning approaches.

While viewing each of the thirty lessons, I chose Border's most salient steps, from aesthetic to questioning, and categorized students improvement in five key areas of performance. All research analysis is directly related to my own perceptions and observations. I recognize this might be viewed

as one-sided or according to someone else's observations, inaccurate. For this, an outside person may have provided a completely different perspective, creating potentially a different end result.

The research in this document is time consuming and requires considerable amount of preparation. It also demands a complete understanding of both the Kolb LSI and Border's adaptation of the model. Without this, it is difficult to feel confident and teach with it in the applied studio.

I recognize the irony in challenging students to perform on their lower poles. One challenge which will present itself to you if applying the adaptations of Kolb and Border which I developed is the fact that you will be stretched and challenged to teach students in learning areas where you may be weaker in than they are themselves. For example, my raw score order of the Kolb LSI is: RSO – 41 CE 36 AE 18 AC 21 RO. When I was required to teach students high in either AC or RO, I did not feel comfortable and at times, I felt not qualified. However, pushing through the discomfort and insecurity made me, I acknowledge the improvement in my own ability to relate to students. This has also translated into my own performance on trumpet, allowing me to become a more discerning performer who incorporates theoretical aspects with which I used to be less comfortable. On the other hand, I had an easier time teaching trumpet concepts when working in both the CE and AE poles with which I am very comfortable.

Suggestions for Future Research

Overall, it would seem the implementation of these exercises and teaching does help trumpeters become more musical, more confident in their ability to practice, more creative, and may help them perform more musically. Due to the success of this research project, it would be beneficial to conduct research lessons that include a diverse age range, or incorporate a larger number of participants over a longer period of time week after week. This concept could also apply to other instrumentalists incorporating all brass, winds percussion and string instruments. A larger

sampling of students may provide a more realistic sampling of attitude, satisfaction level and motivation.

I would have liked to incorporate more writing responses during the lessons, rather than just at the end when students filled out the questionnaire. Reflective observation presents an effective platform for writing as a resource that is not necessarily practiced frequently in trumpet lessons. However, having worked on these concepts for the past two years, I have discovered the importance of using this effective teaching and learning tool. A common practice is to require students to keep a practice trumpet journal, where students could express their understanding of the instruction in the form of a written document and document their growth as a musician. According to the results discussed in this chapter, students lower in the reflective observation pole might experience the most “ah-ha” moments when they are keeping a practice journal.

To provide consistent grading criteria, I would create a rubric for rating students’ performance level and ability. I would create a rubric with the breakdown of expectations associated with each rating. I am biased to their improvement and may not have been a hard enough of a grader or assessor during lessons. Performance ratings needed to have stricter expectations and criteria. In addition, I would be interested in seeing how the results would differ if each student were taught with the same repertoire. Performance ratings may have benefitted from a standardized way to grade also.

CHAPTER 6

CONCLUSION

My work is revealing the need for not only a structural and systematic approach to teaching trumpet but also a need for teachers to recognize and adapt to the learning style of each student. These results offer a pedagogical application unique to the trumpet studio at the collegiate level. This involves teaching trumpet teachers to incorporate the four poles of the Kolb LSI into their instruction. Teachers are also given a way to understand how both they learn and how their students learn trumpet concepts and repertoire the best.

The results of this research suggest a more sophisticated way to teach at the collegiate level. I have used the implications and results of my research to create a pedagogical document that further explores teaching trumpet concepts and repertoire with the perspectives of 1) trumpet repertoire, 2) tonguing and 3) sound concept, while incorporating Kolb's four poles of learning. The concepts and musical examples in each lesson are drawn from the most salient steps I identified in Border's model, as well as, both my personal teaching experience and inspiration from the four brass pedagogues, Arnold Jacobs, Vincent Cichowicz, David Hickman and Clint "Pops" McLaughlin.

Teaching students with their individual learning styles in mind, which includes both their strengths and weaknesses, may 1) diversify your teaching methods, while providing you with multiple modes of presentation in the applied trumpet studio, 2) help you reach each student more effectively and in return, students will become more responsive 3) help you encourage student's overall trumpet ability, (namely, musicality, technical facilitation, practice techniques and learning retention to name a few), and last 4) provide the necessary tools and knowledge base to implement foundational elements of David Kolb's Learning Style Inventory (LSI) and Border's adaptation of Kolb's LSI for teacher instruction and student learning. The resulting instructional materials not

only could serve as an accessible guideline to applying the Kolb LSI to teaching trumpet but also as a reference to major existing trumpet pedagogies and methods as they relate to a cognitive learning style approach. Since conducting the research lessons in 2012, I have explored several different pedagogues as they relate to the Kolb LSI. The possibilities are endless.

My research also highlights the trumpet student as an individual learner by utilizing a specific learning model. This enhances not only the student's learning experience but also the teacher's ability to relate to each student. The positive response with students, and musical improvement along with my new awareness in teaching at the collegiate level together demonstrate the effectiveness in incorporating both the raw scores from the Kolb LSI and Border's adaptations for student learning and teacher instruction into the applied trumpet studio.

It is my hope that by acknowledging my own need for teaching reform in the applied trumpet studio at the collegiate level I might encourage others to look outside of the "historic lineage of their instrument's pedagogy" and pay attention to "previous training in educational theories" (Persson, 2000, pg 26). By acknowledging the significance in expanding your educational horizons as a performance major, I believe we can revolutionize how the trumpet studio is viewed and also provide a more concrete in assessing student's improvement and progress. Through my research, I became to recognize the direct correlation between student's success and their learning styles with my teaching style and my own learning style. I also understood the impact I can have on my trumpet students learning experience. In with this, the learning atmosphere in the applied one-on-one music studio is ultimately up to us as teachers to create our ideal learner friendly environment. It is possible to be intentional when teaching your students. It is our opportunity as performance majors who are seeking opportunities in post-secondary education to not just perform with precision, but to invest in each student as a learner.

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APPENDIX A

Figure 1

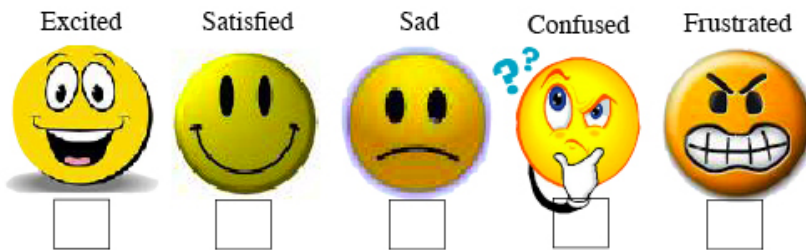
Kolb LSI Trumpet Lessons Questionnaire

NAME: _____

Repertoire: _____

DATE: _____
 METHOD: RSO CRSO C
 P: 1 2 3 4 5
 For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

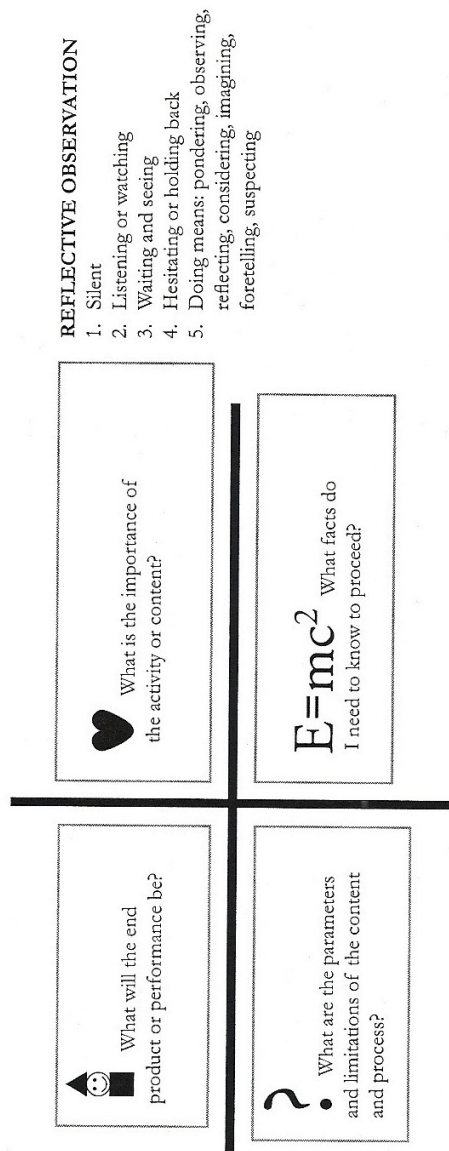
A.1.6. Definitions of the Poles for the Kolb LSI

CONCRETE EXPERIENCE

1. Aesthetic, sensorial
2. Real, tangible
3. Emotional/sensing thought
4. Movement or progression through life
5. Doing means: figuring things out on your own, responding, creating, conversing, and taking action for something important

ACTIVE EXPERIMENTATION

1. Verbal
2. Contributing or questioning
3. Jumping in and sparring
4. Trying or experimenting
5. Doing means: starting, questioning, manipulating, testing, playing devil's advocate, doubting, rejecting, and being physically active



Adapted (Considerably) by Laura L.B. Border from Kolb, David A., *Learning Styles Inventory*, McBer & Company, 1976, revised 1985.

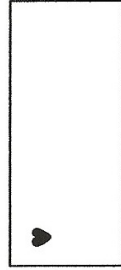
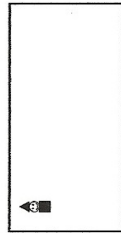
Applying the Poles to a Discipline-Specific Concept & to Matching Student Interactions

CONCRETE EXPERIENCE

1. _____
2. _____
3. _____
4. _____
5. _____

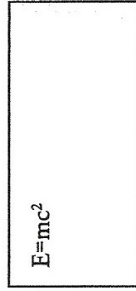
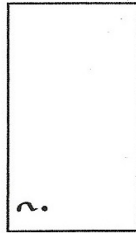
ACTIVE EXPERIMENTATION

1. _____
2. _____
3. _____
4. _____
5. _____



REFLECTIVE OBSERVATION

1. _____
2. _____
3. _____
4. _____
5. _____



ABSTRACT CONCEPTUALIZATION

1. _____
2. _____
3. _____
4. _____
5. _____

Adapted (Considerably) by Laura L.B. Border from Kolb, David A., *Learning Styles Inventory*, McBer & Company, 1976, revised 1985.

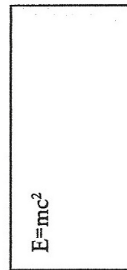
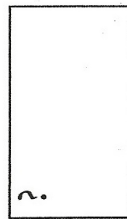
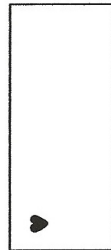
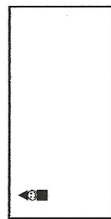
Applying the Poles to a Discipline-Specific Concept & to Matching Student Interactions

CONCRETE EXPERIENCE

1. I play or play recording: When you hear this piece or portion of piece, what do see in your mind?
2. Please sing and press the corresponding valve
3. How do you feel about singing this piece? Part?
4. How have you changed as a trumpet player or how has your trumpet playing changed?
5. Why is this [the improvement on musical piece or passage] important to you?

ACTIVE EXPERIMENTATION

1. What questions/comments do you have about this piece? Or what you heard?
2. Tell me something I don't know about this piece or about your trumpet playing in this piece.
3. Ask me a question or make a comment about the musical piece, or playing
4. Try (s) a different way
5. What are you unsure about?



REFLECTIVE OBSERVATION

1. Listen to recording or me play this passage or piece.
2. Watch or listen to what I play, or is played.
3. Think about what you are hearing but wait to tell me what you think.
4. Listen carefully, I might just trick you so don't answer too quickly.
5. Observe what is being played

ABSTRACT CONCEPTUALIZATION

1. What genre is this etude, solo or study?
2. What do these symbols, articulations etc, mean in this piece? Mark your part with trick spots, note combinations, etc.
3. What is the form of this piece? What is the composer getting at?
4. What is the articulation or extending techniques and how are these techniques supposed to be played?
5. Play how you think these marks should be played and tell me what you think?

Adapted (Considerably) by Laura L.B. Border from Kolb, David A., *Learning Styles Inventory*, McBer & Company, 1976, revised 1985.

APPENDIX B

Most Salient poles and steps occurring during research lessons (Highlighted marks represent the two lowest poles of student)

	CE 1	CE 2	CE 3	CE 4	CE 5	RO 1	RO 2	RO 3	RO 4	RO 5
SA	II	I	I				I		I	III
SB	III	II	II			I			II	II
SC		III				II				I
SD	I	II		II				I	I	III
SE	III	II								III
Sub Total	10	10	3	2	0	3	1	1	4	12
POLE TOTAL	CE: 25					RO: 21				

Most Salient poles and steps occurring during research lessons (Highlighted marks represent the two lowest poles of student)

	AC 1	AC 2	AC 3	AC 4	AC 5	AE 1	AE 2	AE 3	AE 4	AE 5
SA	I	II		I		I		I	III	
SB	I	I	I	II	I	II	I		II	
SC	II		I	I		II	I		I	
SD	II		I	I		II	I		III	
SE	II	I	I			I	I	II	II	
Sub Total	8	4	4	5	1	8	4	3	11	0
POLE TOTAL	AC: 22					AE: 26				

QUANTITATIVE / QUALITATIVE RESULTS FROM RESEARCH LESSONS		
QUANTITATIVE DATA CUMULATIVE RESULTS CHART	DISCUSSION/EXPLANATION	RESULTS
Two most Salient Poles OVERALL	POLES Concrete Experience Reflective Observation Abstract Conceptualization Active Experimentation	Concrete Experience & Active Experimentation provided students with more trumpet/musical learning moments
Most Salient/frequent noted aspects during research days	ASPECTS/STEPS CE 1, 2, 3, 4, 5 RO 1, 2, 3, 4, 5 AC 1, 2, 3, 4, 5 AE 1, 2, 3, 4, 5	<u>MOST SALIENT ASPECTS</u> CE 1: (Aesthetic, sensorial) - When you hear this piece or portion of piece what do you see in your mind?" CE 2: (Real, tangible) - Please sing and press the corresponding valves RO 5: (Doing means) pondering, observing, reflecting, considering, imagining, foretelling suspecting- Observe what is being played AC 1: (Intellectual, mental) - what genre is this etude, solo or study? AE 1: (Verbal) - What questions/comments do you have about this piece? Or what you heard? AE 4: (Doing means) - starting, questioning, manipulating, testing, playing devil's advocate, doubting, rejecting, and being physically active. - Try (X) a different way.
Method vs. student attitude and Satisfaction level	METHOD: teaching either to student's raw score order (RSO) or counter raw score order (CRSO)	Students attitude towards the lesson is not directly related to being taught according to either the raw score order or counter raw score order.
Method vs. student motivation level	METHOD: teaching either to student's raw score order (RSO) or counter raw score order (CRSO)	Students motivation level is not directly related to being taught according to either the raw score order or counter raw score order
Method vs. student performance rating	METHOD: teaching either to student's raw score order (RSO) or counter raw score order (CRSO)	Student performance rating was slightly lower when being taught according to the CRSO when compared to the RSO.
Two lower poles of each student provided the most learning and improvement on trumpet	I highlight each student (SA, SB, SC, SD and SE) and their top one to two most effective lower pole experiences during the four research sessions.	SA: Day Two, Lesson One 9-28-12 [RSO: AC 39AE 30 RO 28 CE 23] SB: Day Six, Make Up Lesson for Day two, (9-28-12) Lesson one. 11-16-12 [RSO: AC 41 RO 34 AE 32 CE 16] SC: Day Two, Lesson One 9-28-12 [CRSO: AC 24 AE 29 CE 30 RO 40] AND Day Five, Lesson Four 11-16-12 [RSO: RO 40 CE 30 AE 29 AC 24] SD: Day Two – Lesson One 9-27-12 [RSO: CE 41RO 28 AE 27 AC 24] AND Day Three, Lesson Two 10-19-12 [CRSO: AC 24 AE 27 RO 28 CE 41] SE: Day Two, Lesson One 9-26-12 [CRSO: RO 20 CE 24 AC 33 AE 42] AND Day Three, Lesson Two, 10-18-12 [RSO AE 42 AC 33 CE 24 RO 20]
Student's overall musical / trumpet improvement over course of research lessons	Five main areas of improvement	<ol style="list-style-type: none"> 1. visualization 2. technical facilitation 3. practice techniques 4. listening skills (pitch & interval identification/recognition 5. verbal communication between student and teacher

APPENDIX C

STUDENT A: Day One - Baseline Day 9-17-12

Method: NA/ control day

SA: Assimilator/ Equation ($E=MC^2$)

Raw Score: AC 39 AE 30 RO 28 CE 23

Counter Raw Score: CE 23 RO 28 AE 30 AC 46

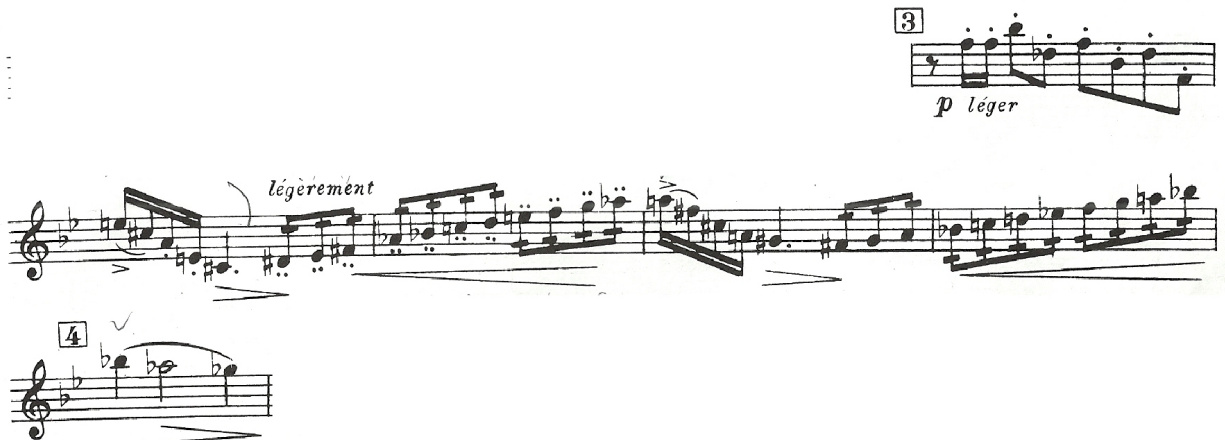
C: *The literature for SA determined during the Baseline Day for the course of research was:

Henri Tomasi's "Concerto for Trumpet" – Movement I

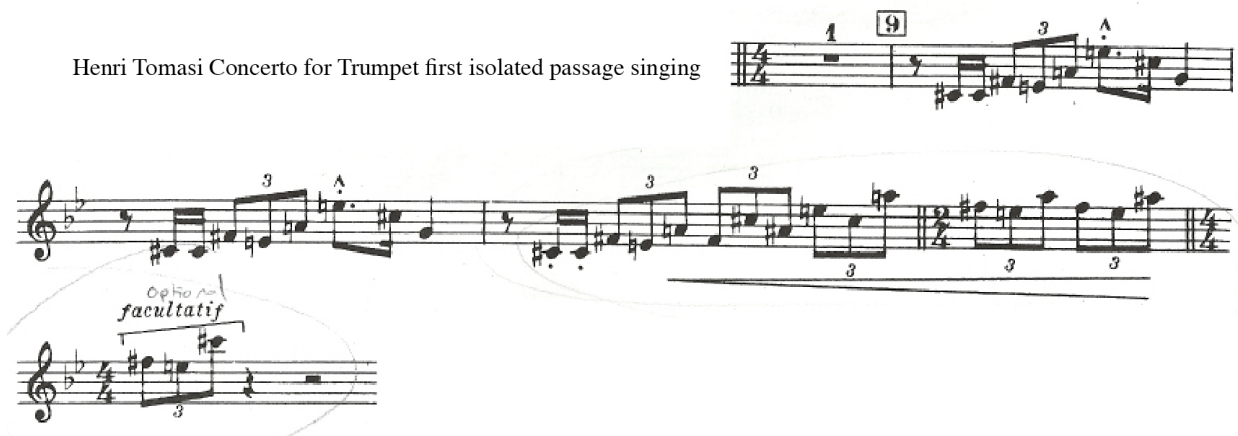
***All musical examples taken from SA's copy of solo used throughout study.**

L: SA chose the following musical examples, which were challenging, to focus on during the lessons. In addition to these selections, we also covered larger sweeps including the beginning to measure marking five and the cadenza. By the time the four research lessons were finished, we covered the entire first movement of the Trumpet Concerto.

Measure marking three to four in the first movement.



Henri Tomasi Concerto for Trumpet first isolated passage singing



Henri Tomasi Concerto for
Trumpet second isolated
passage singing



For SA, the most challenging aspects of the above-mentioned excerpts are:

- Large intervallic leaps
- Difficulties in slurring passages, both ascending and descending
- Maintaining a brilliant sound while doing difficult patterns including large intervallic leaps.
- Single or double-tonguing passages
- Ability to accurately hear and play the 10th and 12th harmonics (fourth space E and fifth line F on the staff)

F: I gave a performance rating of a 4 as the initial performance rating. When asked attitude toward the lesson, SA marked satisfied. SA marked 'somewhat motivated' after the session together due to not being taught during this day. During the lesson, SA projected a high level of motivation to practice the concerto, expressing the desire to learn this piece since the junior year of high school. Since this, SA has viewed the piece more like a hobby and hopes to perform it during the senior recital.

Kolb LSI Trumpet Lessons Questionnaire

SA: Day One - Baseline Day 9-17-12

NAME: Student A

Repertoire: Tomasi "Concerto for Trumpet" - Movement I

DATE: 9-17-12

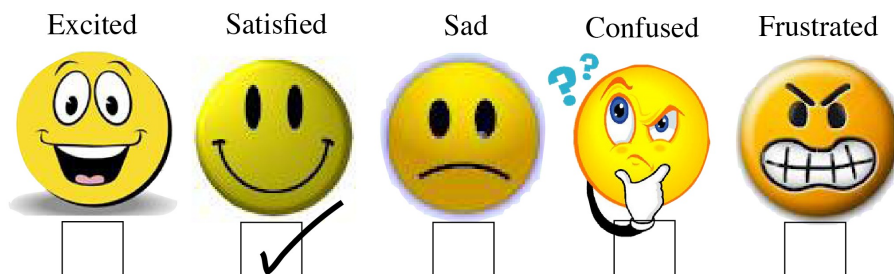
METHOD: RSO CRCO **C**

P: 1 2 3 **4** 5

BASELINE DAY

For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Straight forward. I answered some questions about Tomasi and played. Followed well.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned a little bit on how these sessions will go.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

I could have warmed up better before.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT A: Day Two, Lesson One 9-28-12

Method: (RSO) AC-39 AE-30 RO- 28 CE- 23

C: Henri Tomasi “Concerto for Trumpet”: Movement I, Beginning – measure marking, five.

L: Most Salient aspects in each pole in RSO

CE 2: “Please sing and press corresponding valve” Tomasi’s “Concerto for Trumpet” consists of quick and awkward intervallic leaps. Singing them can be as challenging as playing them, if not more. SA sang and pressed the corresponding valve from the beginning of movement one to measure marking number one, as well as, measure marking three to four, seen below.

The image shows a handwritten musical score for a trumpet part, likely for a student. The score is written on five staves. The first staff begins with the tempo and mood markings: "Vif ♩ = 120 al lessce", "Fantasque (a piacere)", "(comme une cadence)", "(sans sourdine)", and "mf scherzando". The second staff has a measure marking "3" and a "3" indicating a triplet. The third staff has a measure marking "1" and "Lent ♩ = 60 (mettez la sourd. Bol)", followed by "2", "Tres lointain et expressif", "Ossia", and "pp (vibrant et doux)". The fourth staff has a measure marking "3" and "p léger". The fifth staff has a measure marking "4" and "légèrement". The score includes various musical notations such as notes, rests, and dynamic markings.

I encouraged SA to take a slow tempo in order to accommodate the larger leaps, while I providing a reference pitch. During the first run through, SA demonstrated difficulty finding the pitches. However after two more times of slower tempos, SA became more accurate. After three times of singing and fingering it slow, we picked the tempo up, where SA executed the passage with

marked improvement and clarity. SA's performance was audibly more informed by the singing provided in step two of Concrete Experience.

RO 2 & 5: "Listen to what is played" then "observe what is being played". I played two recordings from two artists, Wynton Marsalis and Maurice André. When asked to share what was observed, SA noted the difference in both performers' use of vibrato and rubato. Marsalis incorporated less vibrato and rubato than Maurice André. Immediately after listening to the recordings, SA played the opening of the Tomasi, imitating both interpretations. SA was successful in adapting to each style. The guided listening reflective observation provides during lessons allow for a more discerning student.

AC 2: "What do these symbols, articulation etc., mean in this piece?" During step two in abstract conceptualization, I asked student to discuss what the articulation and symbols mean in the Concerto. Having just discussed the genre in step one, being 20th century French Classical music, SA expressed articulation should be exaggerated and marked. I shared that the French style of trumpet playing tends to be more towards to the brighter, lighter with a more compact tone quality.

AE 3: "Ask me a question or make a comment about the musical piece" Step three in active experimentation allows the student a platform to express what is on their mind, ask questions they may need for better clarification or just make a statement. I asked SA to "ask a question or make a comment about this piece or your playing". SA replied with, "the Tomasi to me is not safe playing, it is more like redline playing, I want to take risks."

F: During the first lesson of the research period, I taught SA according to the raw score order. I gave SA an overall performance rating of a five, due to the response and adaptability towards the concepts taught. SA marked "excited" towards the lesson and very motivated to practice outside of the lesson. In question two on the Questionnaire, SA expressed being "pretty confused for some bits, like "mark in articulations", "what imagery comes to mind?" Being the lowest pole, scoring a 23, this answer highlighted the benefits of being taught in the low scoring poles. When taught in concrete experience, SA was challenged to view concepts with a new perspective. SA shared in regards to learning this information, it was not a clarity issue rather, a new way of looking at information. Question three in the Questionnaire asks what the student learned in the lesson, to which SA responded with "I learned to stop and think about the piece rather than dive right in. Thinking things through like "what do I want to come across here?" was very helpful. Also, singing and listening does not only apply to pretty lyrical passages, ear needs to ALWAYS be on." SA benefitted, again from being taught to the lower scoring poles, concrete experience and reflective observation.

Kolb LSI Trumpet Lessons Questionnaire

SA: Day Two, Lesson One 9-28-12

NAME: Student A

Repertoire: Tomasi "Concerto for Trumpet" (Mvmt. I & Cadenza)

DATE: 9-28-12

METHOD: RSO CRSO C

P: 1 2 3 4 5

For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).

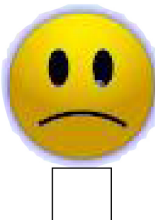
Excited



Satisfied



Sad



Confused



Frustrated



2. How well were you able to follow this lesson today? Please explain in detail.

I was pretty confused for some bits ("mark in articulations", "what imagery comes to mind?") But, it was more – so stuff I have never thought of rather than a lack of clarity. However, overall I gathered everything you taught very well!

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned to stop and think about the piece rather than dive right in. Thinking things through like "what do I want to come across here?" was very helpful. Also, singing and listening does not only apply to pretty lyrical passages, ear needs to ALWAYS be on.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

No. I feel like it was a very good amount of information to chew on for the next few weeks.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT A: Day Three, Lesson Two 10-19-12

Method: (CRSO) CE-23 RO-28 AE-30 AC-46

C: During this lesson, we focused on Tomasi's Trumpet Concerto, Movement I: Beginning – number 1. Although covered in lesson one of research sessions, this same section was covered as a recap.

Henri Tomasi "Concerto for Trumpet" measures 1 – 8.

L: The following are the most salient steps of each pole.

AC 4: "What is the articulation, extending techniques and how is it supposed to be played?" We discussed measure 3 focusing on the tied staccato triplet eighths in beat one to the quarter note in beat two. SA connected aspect one and two when determining how to play the tied staccato triplet eighths in beat one connected to quarter note beat two. A more legato approach was reached, rather than a literal translation of staccato.

AE 4: "Try this portion (x) in a totally different way." SA experimented with the opening eight measures in two completely different ways. In addition, I asked SA after experimenting with the opening to then play it how SA is used to playing it. After experimenting, the opening was freer, with more rubato and excitement.

RO 4: "Listen carefully, I might just trick you so don't answer too quickly" I played the opening of Tomasi, measure 1- 8 in two distinct styles; one in strict time, with pronounced articulation and quick sixteenths and two, rubato with slower sixteenths. When asked to "listen carefully, I might just trick you so don't answer too quickly," SA initially expressed confusion in not remembering too well, regarding the two playing examples. After guided questioning, SA determined the differences in the two.

CE 1: "When you hear this piece or portion of piece what do you see in your mind?" After I played the beginning to measure marking one, I asked SA when you hear this, what pictures in your mind

do you see? SA replied, “It reminds me of a Paris version of Rhapsody in Blue. I see a New York or Chicago type area with an urban landscape of Paris. An Urban landscape of Paris is what I see.”

F: SA was given a five for performance, as a result of their ability to adapt and incorporate the aspects requested during lesson. In addition, the attitude SA presented was willing and non confrontational. SA marked excited and satisfied to represent personal attitude toward the lesson, while marking a ‘1’, very motivated to work on the material as a result of the lesson. For the next session, the following material was requested: Tomasi Movement I: opening to measure box 4.

Kolb LSI Trumpet Lessons Questionnaire

Day Three, Lesson Two 10-19-12

NAME: Student A

Repertoire: Tomasi "Concerto for Trumpet" (Mvmt. I, Cadenza)

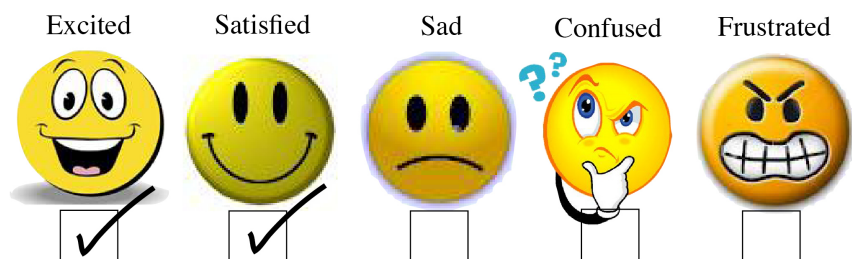
DATE: 10-19-12

METHOD: RSO **CRSO** C

P: 1 2 3 4 **5**

For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

It was very clear. Any confusion as to what to do was cleared up with a follow-up question.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned to really think about what I was doing. Reinforcing "what pictures do I have for this piece?" and "What do I want the articulation to be?" etc.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

I don't think so. Very focused lesson on one section, which will help on the whole piece. I'm ready to work it!

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT A: Day Four, Lesson Three 10-26-12

Method (CRSO) CE- 23 RO- 28 AE- 30 AC- 46

C: During this lesson, all five aspects of the poles were focused towards Tomasi's Trumpet Concerto, Movement I: 1-33 (opening to section number 4).

L: Most Salient aspects in each pole in CRSO

AC 1: "What genre is this etude, solo or study?" I gave SA material to read regarding the genre of the work, providing information to accurately discuss with me the genre and background of Tomasi's Trumpet Concerto. Information included general biographical information on composer and his music.

AE 1 & 4: "What questions/comments do you have about this piece? Or what you have heard?" and "Try (x) a different way." When asked, "What questions or comments do you have about this piece or what you have heard?" SA expressed having difficulty in producing a certain musical concept in Number 3. Rather than being in the forefront of the music, SA asked how to be more in the background. SA experimented with section number 3 – 4 by playing it three different ways. SA chose to alter dynamics by 1) Playing it forte with thick accented notes 2) Legato and slurred at a mf dynamic and 3) legato and mixed articulation while playing piano dynamic. After experimenting, SA did a run through of section 3 – 4 as written, demonstrating the ability to gain greater control of musicality to achieve the desired musical outcome.

RO 5: "Listen to recording or me play this passage or piece" After listening to the Lent section, SA discussed observations of musicality and subtle nuances of the music including, "it is very song like, didn't go overboard with vibrato although it wouldn't be out of character if there was more and made it kind of nice and intimate." From these observations, I asked SA to play this section with these realizations, resulting in SA performing a complete and informed musical line.

CE 1: "When you hear this piece or portion of piece what do you see in your mind? When asked "What picture do you see in your mind?" after listening to a recording of the Lent Section beginning in measure nine, SA expanded on the Paris Rhapsody in Blue concept and city landscape. Rather than reminding SA of the city, this section represented a quieter, a more-tame and less urban atmosphere. Rather, moving more towards the rural area of France. SA is demonstrating a developing idea of a story.

F: SA was given a five for performance as a result of their ability to adapt and incorporate the aspects requested during lesson. In addition, the attitude SA presented was positive. SA marked satisfied to represent personal attitude toward the lesson, while marking a '1', very motivated to work on the material as a result of the lesson. For the next session, the following material was requested: Tomasi Movement I: Any spot or section SA deemed difficult and tricky.

Kolb LSI Trumpet Lessons Questionnaire

Day 4: Lesson Three 10-26-12

NAME: Student A

Repertoire: Tomasi "Concerto for Trumpet" (Mvmt. I)

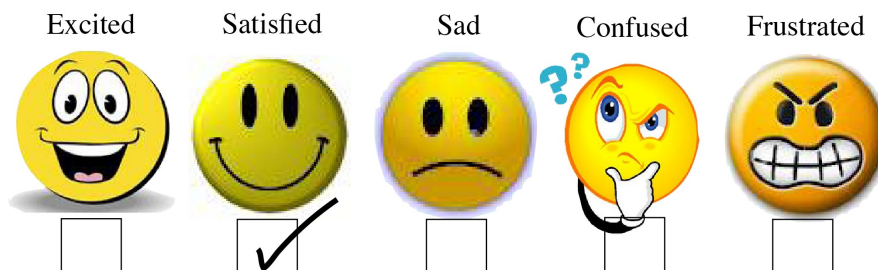
DATE: 10-26-12

METHOD: RSO **CRSO** C

P: 1 2 3 4 **5**

For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Very well. Straightforward to the music and little nuances to help it sparkle.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

The advice at 3 was very helpful. Working the section in a pseudo –“Legato” way made it pop more like I wanted without sounding fluffy. I now have a better understanding of how to work the 16th runs, too.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

I think I said it last time, but it was enough to really chew on without being overwhelming. I think more information might have been overwhelming.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT A: Day five, Lesson Four 11-9-12

Method: (RSO) AC- 39 AE- 30 RO- 28 CE -23

C: During this lesson, all five aspects of the poles were focused towards Tomasi's "Concerto for Trumpet," Movement I: SA chose to focus on key sections or measures. During this lesson, difficult parts were isolated while the four poles were incorporated into instruction.

L: Most Salient aspects in each pole in RSO

AC 2: "What do these symbols, articulations etc., mean in this piece? Mark your part with tricky spots, note combinations, etc." I asked SA to mark their part with tricky spots, combinations, etc. SA chose several sections throughout the first movement including: Numbers 9 - 10, and measure number 17.

AE 4: "Try this section (x) totally different way" With guided help, I guided SA to play measure marking 9 in quarter notes. Then asked SA to try the passage in a totally different way, SA dotted the rhythm then played it again, then dotted it again. SA then played it slurred, slurred. When SA played it slurred, the airflow naturally increased, making SA more accurate in the execution of musical line. I then instructed SA to apply the same concept of airflow and energy that was achieved by slurring to playing as written, all tongued. SA demonstrated the ability to adapt the experimenting to the final product.

RO 5: "Observe what is being played" Directly after SA experimented with the rhythms, we moved to the reflective observation pole where SA related the previous success in executing the measures 9 - 10 and 17. SA observed the correlation between the airflow and slurring then connected this same concept to tonguing the passage.

CE 3: "How do you feel about singing this piece? Part?" SA expressed difficulty in singing and pressing the corresponding valves down in the chosen spots of the first movement, including: Numbers 9 - 10, and measure number 17. After asking, "How do you feel about singing/fingering?" SA replied, "I didn't realize how much I didn't hear the pitches".

Henri Tomasi Concerto for Trumpet first isolated passage singing

The image displays a musical score for Henri Tomasi's Concerto for Trumpet. The top staff is a trumpet part in 4/4 time, featuring measures 9 and 10. Measure 9 is marked with a '1' and a '9' in a box, and measure 10 is marked with a '3'. The bottom staff is a piano part, also in 4/4 time, with measures 9 and 10. A section of the piano part is marked 'facultatif' and includes a triplet of eighth notes. The score is written in G major (one sharp) and includes various articulations and dynamics.

Henri Tomasi Concerto for
Trumpet second isolated
passage singing



F: SA was given a four for performance as a result of their ability to adapt and incorporate the aspects requested during lesson. In addition, the attitude SA presented was positive. SA marked Satisfied to represent personal attitude toward the lesson, while marking a '2', somewhat motivated to work on the material as a result of the lesson. When asked in question three, "What did you learn today?" SA highlighted aspects learned when being taught in reflective observation, saying, "I learned how to better work some of these harder sections and what to think about when doing so. Practiced things like listening, air flow, and musical flow." Each concept was discussed when I taught SA in the reflective observation pole.

Kolb LSI Trumpet Lessons Questionnaire

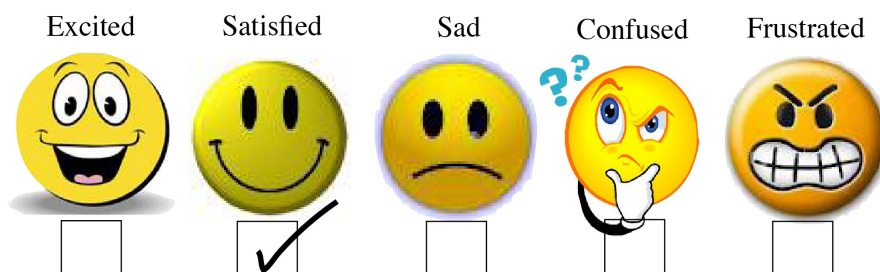
Day Five, Lesson Four 11-9-12

NAME: Student A

Repertoire: Tomasi "Concerto for Trumpet" (Mvmt. I, Cadenza)

DATE: 11-9-12
METHOD: **RSO** CRSO C
P: 1 2 3 **4** 5
For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Well. Went straight to the difficult sections and ironed them out.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned how to better work some of these harder sections and what to think about when doing so. Practiced things like listening, airflow, and musical flow.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

I don't think so. I know what I need to work and how to work it, now.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT A: Day Six, Discussion 11-16-12

Method: NA/ run through of repertoire plus discussion

Day six was used solely for music run through and teacher student discussion. Student A discussed their thoughts regarding participation in research sessions. I have categorized the comments according to the four poles I feel they best represent. The following are Student A's comments.

Concrete Experience:

"I identified the most with moving my thinking to musicality, I learned that I can use my musical ear much more in conjunction with technical playing. I learned how to approach very technically demanding works in a more efficient way. I felt I learned something about how I attempt trumpet. I tend to attach it very mechanically."

Reflective Observation

"I learned that I can use my musical ear much more in conjunction with technical playing".

Abstract Conceptualization

"When practicing stuff like Tomasi, my brain sometimes gets trapped in fundamentals, which makes such a great piece sound really mechanical and dull".

Active Experimentation

"It was very productive to play excerpts from the solo in different, sometimes uncomfortable ways. I learned how to approach very technically demanding works in a more efficient way. I have learned a great deal on how to practice in general".

APPENDIX D

STUDENT B: Day One - Baseline Day 9-18-12

Method: NA/ control day

SB: Assimilator/ Equation ($E=MC^2$)

Raw Score: AC 41 RO 34 AE 32 CE 16

Counter Raw Score: CE 16 AE 32 RO 34 AC 41

C: *The literature for SA determined during the Baseline Day for the course of research was:

John Prescott: "Sonata no. 3" for Trumpet

Selections from:

Movement I

***All musical examples taken from SB's copy of solo used throughout study.**

L: During the Baseline Day, I gathered SB's understanding of the piece. SB had not yet played the solo, and never heard a recording. Key sections of the piece will be focused on during the research sessions including measure 1- 40 and 141 to the end of Movement I. In addition, we will also make large sweeps of the first movement. When SB played through the first movement, the upper register was not as solid. SB is not sure of the solo at this point, since not spending a lot of time and energy in learning it. During this research period, SB will concentrate in learning the first movement in addition to highlighting difficult passages and concepts of solo work. Certain elements in solo presented SB with challenges, i.e., changing time signatures, awkward intervallic slurring, double-tonguing passages.

F: I gave SB a three in performance mirroring level of understanding and ability on solo. In addition I took in to account SB's attitude towards the music, which was undetermined having not worked on it extensively. SB expressed being excited and confused at the same time from question #1 of questionnaire. Understandably confused, we did not go over the material in a lesson scenario. SB provided feedback in questions 2-4 related to impressions and conclusions gathered through the session. After playing the entire movement for a better understanding of SB's initial performance of the piece, SB noted the need to work on endurance in question three.

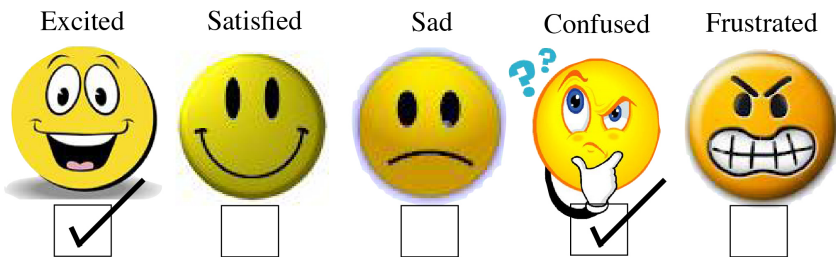
DATE: 9-18-12
 METHOD: RSO CRSO **C**
 P: 1 2 **3** 4 5
 Baseline Day
 For Research Purposes only

Kolb LSI Trumpet Lessons Questionnaire
SB: Day One - Baseline Day 9-18-12

NAME: Student B

Repertoire: John Prescott: "Sonata no. 3 for Trumpet" Mvt. I

1. My attitude toward the lesson today (you may check more than one).



"I am not sure what I need to do yet"

2. How well were you able to follow this lesson today? Please explain in detail.

It felt like more of an introduction.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned I have to work on endurance; I need to work on tonguing.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

Not sure.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT B: Day Two, Lesson One 9-28-12

Method: (RSO) AC-41 RO-34 AE-32 CE-16

C: During the first lesson, the sections of concentration included: beginning to measure 18 from John Prescotts' "Sonata no. 3 for Trumpet": Movement I.

L: CE 2 & 3: "Please sing and press the corresponding valves" and "How do you feel about singing this piece? Part?" SB sang and pressed the corresponding valves from measure one to four, while I played reference pitches. Doing the first time, SB was not able to sing the pitches and was surprised being off every time I would play the reference pitch.

RO 4: "Listen carefully, I might just trick you so don't answer too quickly" I played the beginning to measure 18 two different styles, 1) as written and 2) with changes in articulation and dynamics. SB observed the following elements of trumpet playing:

- Articulation differences
- Timbre of sound differences (soloistic sound versus orchestral trumpet sound)
- Subtle nuances of both articulation and timbre

SB observed these differences and was able to conclude the articulation needs to be light yet forward moving. In addition, SB noted how the accents brought out the intervals discussed in the abstract conceptualization pole. SB also observed the rhythmical energy in the sixteenth notes.

AC 4: "What is the articulation and extending techniques? How is it supposed to be played?" SB responded by discussing the interval, B to F and E to A flat in measures one through three, seen in figure below. Because they are the only accented notes, a great emphasis should be placed, drawing the listener to these intervals. This is also where weight should be directed. SB also expressed, "I do not see a difference between length of articulation".

Prescott opening five measures of first movement



AE 4: "Try (x) a different way" SB experimented with the style of the piece, making it very legato, like a cello. Playing upon this concept, SB played both with a detaché bow and legato bow. This resulted in less notes being missed and a more constant, uninterrupted air stream.

F: SB was very motivated, expressing "I am not sure why there is the option to be "de-motivated" or "not at all motivated", as a music student being motivated is our responsibility or we don't get better. We should always be at-least a 3 on the motivation scale".

I gave SB a performance rating of a three, reflecting the ability of student to adapt to the concepts being taught, as well as, performance in general. Having taken a benadryl before the lesson, SB was not able to give complete attention. For this reason, I also included a make-up lesson on 11-9-12. I include this lesson given on 9-28-12 still because although SB was not able to participate as enthusiastically, I believe valuable insight is provided. Teaching to the Raw Score Order for SB yielded the student to be satisfied with the lesson while being very motivated. Question number three highlighted SB's most effective learning moments, respectfully technical aspect of tonguing and the concrete experience of singing through the trumpet

Kolb LSI Trumpet Lessons Questionnaire

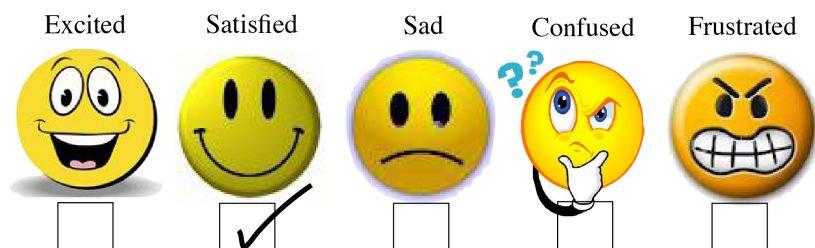
SB: Day Two, Lesson One 9-28-12

NAME: Student B

Repertoire: John Prescott: "Sonata no. 3 for Trumpet" Mvmt. I

DATE: 9-28-12
 METHOD: **RSO** CRSO C
 P: 1 2 **3** 4 5
 Baseline Day
 For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

It was easy to follow. It felt like a normal lesson except we talked more about the music than the trumpet. (Except the tonguing part).

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

To be relaxed and confident when playing and also to tongue at the top of the teeth. The importance of singing was another.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

I think I got enough in for today.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT B: Day Three, Lesson Two 10-19-12

Method: (CRSO) CE-16 AE-32 RO-34 AC-41

C: During the second lesson, the sections of concentration included: Measure 158- end from John Prescotts' "Sonata no. 3" for Trumpet: Movement I.

L: CE 1: "When you hear this piece or portion of piece, what do you see in your mind?" I played from 158 to 167 of the first movement. After playing it, I asked SB "What pictures do you see in your mind?" SB responded by saying, "because of the random and chaotic nature of the music I saw random numbers. I guess I have never thought of what I see in my mind when I am playing". SB continues to discuss which numbers being seen in mind, using pie as example: 3.14159265358979.

RO 5: "Observe what is being played" After asking SB to observe what is being played, SB noted the following characteristics of trumpet playing:

- Rhythm very accurate
- Even though technical passage, it sounded lyrical
- Double tonguing was not uneven, but smooth and consistent
- When playing longer tones, my notes sang and went somewhere rather than when SB feels the notes have the tendency to fade away.
- Notes have movement and direction

AC 2: "What do these symbols, articulations etc., mean in this piece? Mark your part with tricky spots, note combinations, etc." SB demonstrated the ability to write subtle nuances of crescendos and decrescendos when asked to "mark your part..." We discussed how these crescendos and decrescendos also have a direct correlation to air flow. Although not being specifically written in the music by the composer, SB was able to incorporate these "unwritten" elements into playing the solo, resulting in a better musical performance of the line. ***Musical example taken from SB's copy of solo used throughout study.**

Prescott movement I: 156-158 example of SB writing unwritten nuances in music



AE 1: "What questions/comments do you have about this piece? Or what you heard? When I asked SB to tell me something I don't know about trumpet playing or playing the piece specifically, SB informed me of key issues expressing, "I tend to back away when I go higher in register because I don't want to mess up." Understanding this was an issue that was effecting SB's position on the piece gave me a better chance in coming up along side student.

F: Performance rating for SB during the second lesson of the study was a four. SB demonstrated the ability to adapt better to the concepts and go with the flow of the lesson better. Teaching to the Counter Raw Score Order for SB resulted in the student being both frustrated, adding an additional option drawing a melancholy face. SB noted frustration solely in regards to the trumpet playing itself, not feeling good about it. SB also marked very motivated to practice the music after the lesson. In question three, SB references "learning to take baby steps when learning something new", which directly relates to both the active experimentation and concrete experience poles. SB at this point is identifying with the lower two poles of the raw score.

DATE: 10-19-12
 METHOD: RSO **CRSO** C
 P: 1 2 3 **4** 5
 Baseline Day
 For Research Purposes only

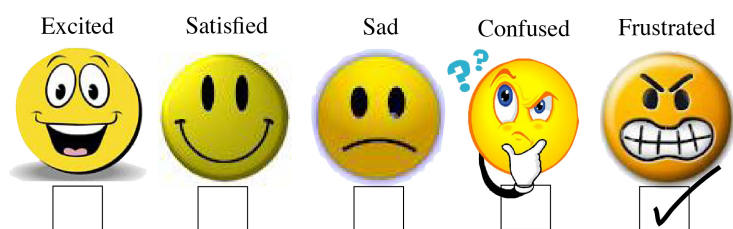
Kolb LSI Trumpet Lessons Questionnaire

SB: Day Three, Lesson Two 10-19-12

NAME: Student B

Repertoire: John Prescott: "Sonata no. 3 for Trumpet" Mvmt. I

1. My attitude toward the lesson today (you may check more than one).



Note: SB added a new face according to their feeling after the lesson: A meloncaly face.

2. How well were you able to follow this lesson today? Please explain in detail.

It was fine. It was a lot at once, but I'm used to that.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned to take baby steps when learning something new and to not just go for the end result initially.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

No because if I knew what that was, I would have asked.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
①	2	3	4	5	6

STUDENT B: Day Four, Lesson Three 10-26-12

Method: (CRSO) CE-16 AE-32 RO-34 AC-41

C: Revisited both the beginning from measure 1 – 18 of Prescotts’ “Sonata no. 3” for Trumpet: Movement I.

L: CE 1 & 2: “When you hear this piece or portion of piece what do you see in your mind?” and “Please sing and press corresponding valve” After playing the first page of Prescott Sonata no. 3 from beginning to measure 40 I asked SB “What pictures did you see in your mind?” SB said nothing at first, but then shared images of people playing studio class although not sure why. In other parts of the first page, for example in measure 27, SB was reminded of “Back to the Future” and proceeded to play an excerpt from the main theme. Also being visualized was Director of Band, Professor McMurray conducting.

Another salient aspect from Concrete Experience is when I asked SB to “Sing and press the corresponding valve down”. SB expressed difficulty, which had not been expressed in the past, saying, “I have a difficult time thinking of my notes as it relates to valves.” I tend to relate my notes to the piano while singing.” SB goes on to say, “When I am thinking of the fingerings, I am not thinking of the music, rather just the trumpet and it is more difficult to sing.”

RO 1: “Listen to recording or me play this passage or piece” When asked to listen to me play the first page, with special attention to tonguing quality, I believe the first aspect of reflective observation was the most salient. The tonguing subject proved to be the topic SB gravitated towards when asking questions, making comments and sharing what was observed.

AC 4: “What is the articulation or extending techniques and how are these techniques supposed to be played?” SB demonstrated a high level of interest in aspect four of abstract conceptualization. I spent the majority of time when teaching in this pole on articulation and how to produce articulation backed with a beautiful tone. I used the example of a sprinkler with has constant water flow with the slight separation as it moves in a circle. (Loubriel, 2009, pg. 7). Due to the large intervallic leaps Prescott incorporates in this solo, we explored how to produce a constant airflow when tonguing by playing a long tone and while maintaining the air speed creating a slight break in airflow by incorporating the tongue. This all made it possible to perform the articulation more successful.

AE 2: “Tell me something I don’t know about this piece or about your trumpet playing the piece” I chose this aspect as the most salient due to the inside perspective SB provided on what type of feedback was most appreciated during lessons. SB shared the following regarding being corrected on the fundamentals of playing the trumpet. “Usually I don’t receive any feedback about what I am doing. But when I do it really helps me, e.g., hand position of trumpet, horn position, etc., I also didn’t know that I had tension in my hand which was effecting my tone. If I wasn’t told this, I wouldn’t know how to make it better”.

F: Performance rating for SB during the third lesson of the study was a four. SB demonstrated the ability to adapt well to concepts presented and go with the flow of the lesson, while performing effectively. Teaching to the Counter Raw Score Order for SB resulted in the student being satisfied with the lesson and very motivated to practice material covered in lesson. SB noted in question mentioned how important it was to not “over think” but rather “learned to trumpet myself” when playing. This is significant in that it highlights SB lowest scoring pole, Concrete experience, the polar opposite concept of AC, which is thinking when learning.

Kolb LSI Trumpet Lessons Questionnaire

SB: Day Four, Lesson Three 10-26-12

NAME: Student B

Repertoire: John Prescott: "Sonata no. 3 for Trumpet" Mvmt. I

DATE: 10-26-12

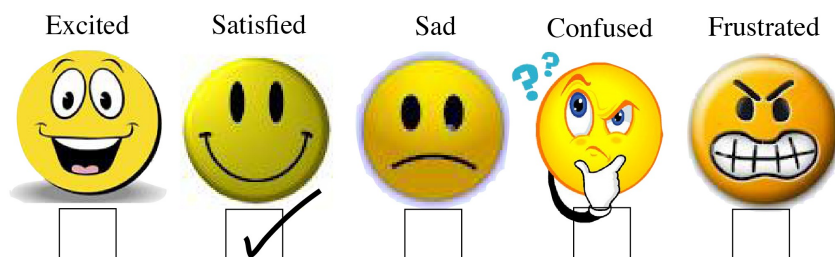
METHOD: RSO **CRSO** C

P: 1 2 3 **4** 5

Baseline Day

For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Good. You explained my confusion and madness very well.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned to trust myself in my playing and not over think.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

No, I feel you were very helpful.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT B: SB: Day 5 – Lesson Four 11-9-12

Method: (RSO) AC-41 RO-34 AE-32 CE-16

C: Revisited both the beginning from measure 1 – 18 of Prescotts’ “Sonata no. 3” for Trumpet: Movement I.

L: CE 1: “When you hear this piece or portion of piece, what do you see in your mind?” Imagery again presented the most salient aspect of Concrete Experience. When asked, “what pictures do you see in your mind?” SB responded by saying images seen out of an Old West movie.

RO 1: “Listen to recording or me play this passage or piece” Through guided listening from aspect 1 of reflective observation, I asked SB to pay special attention to the rhythmic pulse from beginning – measure 40. This encouraged SB to have a specific goal in mind when listening. By incorporating this aspect into teaching, the student is provided a platform to listen to areas where students present challenges. In this case, I observed that SB was not as aware of musical pulse. This was a way I could encourage SB to discern rather than just tell. From doing this guided listening provided by aspect 1, SB shared they tend to rush rather than play in time.

AC 1 & 3: “What genre is this etude, solo or study?” and “What is the form of this piece? What is the composer getting at?” By the third lesson, SB was able to demonstrate a better understanding of Prescott’s piece and background after being asked, “what is the genre of this piece” in each lesson. SB provided useful information about theoretical aspects including the harmonic make up of the trumpet line, consisting of many fourth and fifth intervals and rapid articulate passages, and meter changes along with syncopated rhythms through ties and accents. SB also noted the trumpet repertoire Prescott included throughout the solo including, Kent Kennan’s Sonata for Trumpet and references.

AE 1: “What questions/comments do you have about this piece? Or what you heard?” I asked SB “What questions or comments do you have about this piece or particular passage just discussed?” SB shared, “It is nice to understand how to play metronomically”. This was on SB’s mind due to covering this same subject in reflective observation so it made sense.

F: Performance rating for SB during the fourth lesson of the study was a five. SB demonstrated the ability to adapt well to concepts presented and go with the flow of the lesson, while performing effectively. Teaching to the Raw Score Order for SB resulted in the student being satisfied with the lesson and very motivated to practice material covered in lesson. During the lesson, the lower poles of SB tended to be where time was spent most frequently.

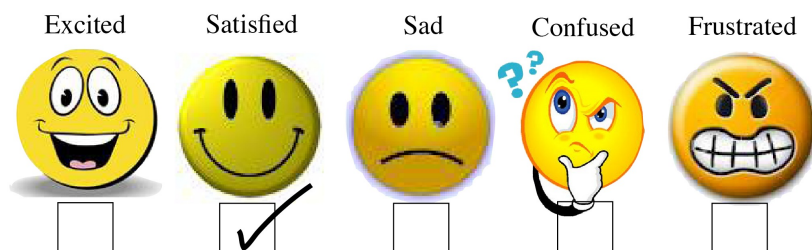
Kolb LSI Trumpet Lessons Questionnaire
SB: Day Five, Lesson Four 11-9-12

DATE: 11-9-12
 METHOD: **RSO** CRSO C
 P: 1 2 3 4 **5**
 Baseline Day
 For Research Purposes only

NAME: Student B

Repertoire: John Prescott: "Sonata no. 3 for Trumpet" Mvmt. I

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

It was good. There were no moments where I felt lost from the motive of the lesson.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

To use a metronome when I play. My time is not very good.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

No. If I knew I would have asked.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT B: Day Six, Discussion 11-16-12

Method: (RSO) AC-41 RO-34 AE-32 CE-16]

Make Up Lesson for Day Two, Lesson One 9-28-12, Plus Discussion

C: During this lesson, we covered a section of the Prescott, which had not yet been isolated during lessons: including a large sweep beginning with measure 79 through measure 156. I chose a new section because I wanted to apply the four poles and respective aspects. SB would be able to experience this section completely new.

L: CE 1 & 3: “When you hear this piece or portion of piece, what do you see in your mind?” and “How do you feel about singing and pressing the corresponding valves?” When asked, “What images do you see in your mind?” SB referenced sounds rather than images, relating the melodies to Kent Kennans’ “Sonata for Trumpet.” SB also mentioned the same intervallic material as Bela Bartok used in Concerto for Orchestra. I also mentioned the relation to Ewazen’s “Sonata for Trumpet” during the opening line of the third movement.

Step three in Concrete Experience also showed marked improvement to singing and pressing corresponding valve. SB demonstrated improved ability to sing on pitch without deviating from the reference pitch I provided.

RO 5: “What are you unsure about?” SB observed the difference between my playing examples, in regards to placing accents in the correct place. It was determined SB was placing the accents on the incorrect tones. Instead of playing accents where composer placed them, SB placed them where they naturally wanted to go or was easier to play.

AC 5: “Play how you think these marks should be played and tell me what you think?” The most salient aspect of this pole was number five, because SB was able to convincingly play the articulation as we had been discussing throughout the several sessions and informed me why the way they played it was correct. There was less insecurity on playing the articulation. In previous sessions, SB had a difficult time when I asked the student to “Play how you think these marks should be played and tell me what you think”. When asked during this session, without hesitation, SB performed it exactly how we had been talking about.

AE 4: “Try (x) a different way” SB chose measures 116 - 139 and experimented with the phrase by playing it very slow, lyrical and connected. SB also played it as a large phrase over exaggerating the crescendo in measure 123-124. I then encouraged SB to keep the tempo and perform it with this same lyrical quality, creating in a very effective performance with less notes missed.

F: SB received a Performance marking of a five during this lesson, showing improvement and effective execution of passages along with responding well to questions and concepts presented. During this lesson, I taught according to the Raw Score Order resulting in a satisfied and frustrated mark. SB marked frustrated in regards to how the trumpet playing in SB’s opinion was. As with every lesson up to this point, SB marked “Very Motivated” to practice the material covered in the lesson.

Kolb LSI Trumpet Lessons Questionnaire
MAKE – UP Lesson

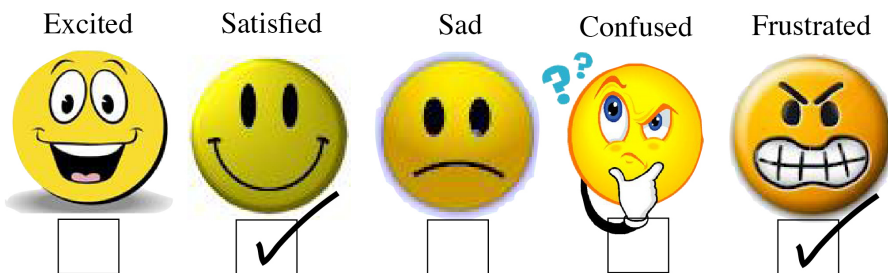
SB: Day Two, Lesson One 9-28-12

DATE: 11-9-12
 METHOD: **RSO** CRSO C
 P: 1 2 3 4 **5**
 Baseline Day
 For Research Purposes only

NAME: Student B

Repertoire: John Prescott: “Sonata no. 3 for Trumpet” Mvmt. I

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

It was good. There were no moments where I felt lost from the motive of the lesson.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

To use a metronome when I play. My time is not very good.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

No. If I knew I would have asked.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT B: Day Six, Discussion 11-16-12

Method: RSO for make up lesson/ Discussion

Day six was used both for a make up lesson and teacher student discussion. Student B discussed their thoughts regarding participation in research sessions. I have categorized the comments according to the four poles I feel they best represent. The following are Student B's comments.

Concrete Experience

"I learned to not over think things, I became better at not analyzing as much and trust myself more." This is a major learning accomplishment because it is natural for SB to think and analyze the information being presented. Being very high in abstract conceptualization, this is natural.

Reflective Observation

SB recognizes the ability to hear the way the piece should be performed versus the ability to perform this piece. SB expressed, "I have a good understanding of the piece but I cannot perform it the way I hear it". Maybe not performance ready, SB's observation will soon result in an effective performance.

Abstract Conceptualization

SB clearly gravitates towards abstract conceptualization first when learning, being the highest raw score on the Kolb LSI. SB expresses, "enjoying analytical ways of both learning and teaching".

Active Experimentation

SB asked me if "I found a learning style they responded to best?" This represents the commenting and playing Devil's advocate. This inquisitive nature will allow SB to continue discovering new and interesting concepts in playing the trumpet.

APPENDIX E

STUDENT C: Day One - Baseline Day 9-17-12

Method: NA/ control day

Student C: Diverger/ Heart (<3)

Raw Score: RO 40 CE 30 AE 29 AC 24

Counter Raw Score: AC 24 AE 29 CE 30 RO 40

C: *The literature for SA determined during the Baseline Day for the course of research was:

Eric Ewazen – “Sonata for Trumpet”

Movement I

***All musical examples taken from SC's copy of solo used throughout study.**

L: During the Baseline Day, I gathered SC's understanding of the piece. "Sonata for Trumpet" by Eric Ewazen was chosen for SC as a jury preparation. Having had the solo for a total of four days before the research start date, SC had not had an opportunity to prepare or run through the first movement. The challenges for SC were intervallic leaps, certain rhythms and tonguing sections. The following are SC's overall impression of the Sonata:

- Enjoys the lyricism
- Excellent solo to demonstrate the trumpet and ability to play with a brilliant tone
- Will need to work on endurance
- Very excited to work on this piece

Areas of focus for research sessions were determined to be:

- Movement I: beginning to measure 23

Lento ♩ = 52

SU337

p

Allegro Molto ♩ = 132

5

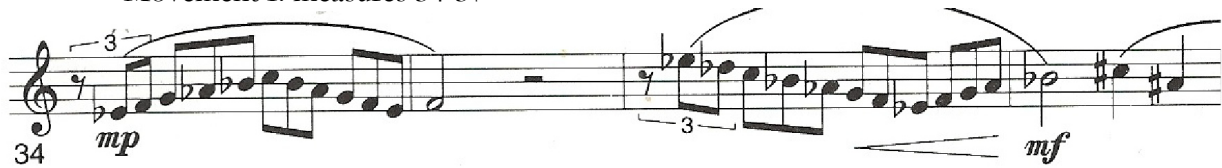
11

18

mf *f* *p*

10

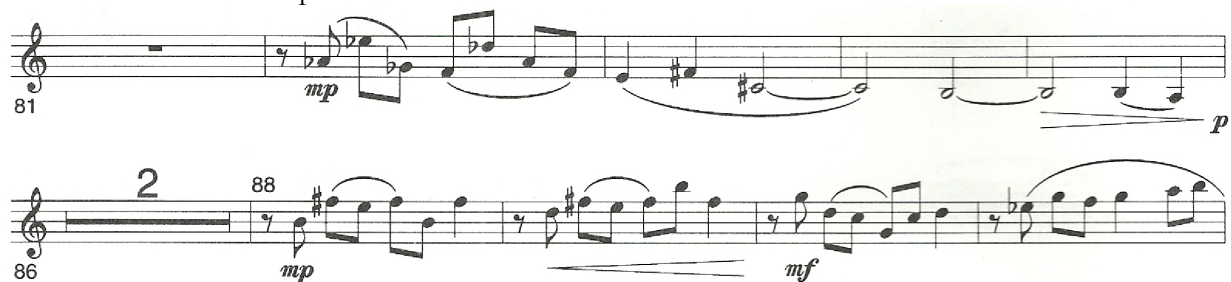
- Movement I: measures 34-37



- Movement I: Measures 41, 45, scale run ascending in 47



- Intervallic leaps measures 82-91



- Time issues triplet versus eighth notes

F: On the baseline day, I gathered initial performance ability and information regarding the most challenging aspects of solo. I taught neither to the Raw Score Order, or Counter raw score order during the baseline day. SC received a two in performance mirroring level of understanding and ability on solo. Being very familiar with the music, however not actually performing or working on the solo, SC demonstrated difficulty in playing the solo. SC marked excited when asked about the attitude toward the lesson and very motivated to practice and learn the music for the next session. Although during this baseline day, I did not apply different teaching order of the raw score, SC provided feedback in questions 2-4 related to impressions and conclusions gathered through the session. Answer number three etudes to SC's personal awareness in the limited knowledge and playing ability of the solo while answers two and four represent the student's natural level of motivation towards learning the solo. SC begins the study with a high level of self-awareness and motivation.

Kolb LSI Trumpet Lessons Questionnaire

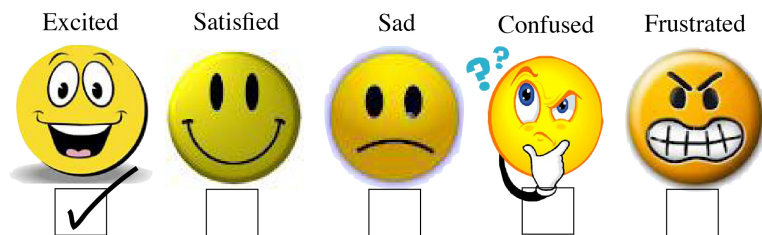
SC: Day One - Baseline Day 9-17-12

NAME: Student C

Repertoire: Ewazen "Sonata for Trumpet" Movement I.

DATE: 9-17-12
 METHOD: RSO CRSO **C**
 P: 1 **2** 3 4 5
 Baseline Day
 For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Pretty well. Any issues were from my lack of preparation on the piece.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I didn't learn much, but that was because of my limited knowledge of the piece.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

Nope. I just need to prepare the piece better.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT C: Day Two, Lesson One 9-28-12

Method: (CRSO) AC-24 AE-29 CE-30 RO-40

C: Eric Ewazen – “Sonata for Trumpet”: Movement I. For the first lesson of research, we focused on the first page of the first movement 1 – 23. I chose to concentrate on key sections and passages of the first movement while also making a larger sweep with these selected passages, allowing an in-depth perspective of how each pole might increase SC’s ability to improve. This micro focus can be applied to the entire movement.

L: CE 2: “Please sing and press corresponding valve down” I gave SC reference pitches for measure 1-23. SC struggled with singing and fingering the opening of the solo, having difficulty keeping on pitch, ending a minor third off from where the pitch should have been. As a result, SC was able to hear and realize just how much more was needed in pitch and interval identification not only in playing. Pitch identification became the most salient aspect from question number two and allowed the experience to be real and tangible at the same time.

RO 1: “Listen to recording or me play this passage or piece” Aspect number one of reflective observation was the most salient one mainly because SC had not listened to the Ewazen Sonata. The only performance SC listened to was during studio class of a fellow colleague. With reflective observation being the highest pole, SC shared that listening to the solo is the first thing gravitated to. However, SC expressed intentionally not listening to the solo, thinking we might cover that in the lesson. After listening to the first movement with Ray Mase on trumpet, SC commented how smooth the articulation and tone sounded, further commenting the difference between SC’s and the interpretation of Ray Mase.

AC 1 & 4: “What genre is this etude, solo or study?” and “What is the articulation or extending techniques and how are these techniques supposed to be played?” When asked aspect one of abstract conceptualization, “What genre is this piece?” SC was not able to provide an answer and had difficulty connecting the solo to a certain genre. Many times, when working on a solo or etude, one of the most common pieces of information missing for students is key information regarding history of piece, when it was written and why. When asked aspect four, “What is the articulation or extending techniques and how are these techniques supposed to be played?” SC responded by saying, “Follow them rigorously... Usually with the newer sheet music, they are usually pretty good about writing down every single little thing that is supposed to be played.” From here SC formulated theories from looking at the music literally, regarding how certain passages should be played with this in mind. The following is the discussion SC provided:

“So far as tonguing goes, I have to approach it differently. Measure 7, is where I want to pop the E flat, it is a lead into the next phrase and acts as somewhat a mini climax. Crescendos and decrescendos are very important in this music. It leads to more expression and a flowing feeling. How the articulation is written in measure 14, I have a feeling they don’t want to have an impact.”

By asking the interpretation on articulation, I was able to come up alongside SC and understand what perspective might need to be agreed with or changed. From this, I determined SC was coming at this solo more with a jazz interpretation.

AE 1: “What questions/comments do you have about this piece? Or what you have heard?” I asked SC to make a comment or ask a question about the piece. Visibly uncomfortable sitting in the active experimentation pole, SC asked, “Do you feel my approach is correct?” The student was able to bring aspects of the Abstract Conceptualization pole into the Active Experimentation pole. This was the most salient aspect of active experimentation, due to the awareness student presented.

F: During the first research lesson, I taught SC according to the counter raw score order. The overall performance rating I gave SC was a five, due to the ability to adapt extremely well in each pole. Although the playing ability was not at the level for performance, I believe SC demonstrated an acute awareness to each pole, specifically to the lower poles. SC marked both excited and satisfied with the lesson and marked somewhat motivated to practicing the material. I conclude SC marked somewhat motivated because I did not teach during the lesson, rather just gathered opinion and beginning level of material. SC highlighted characteristics of abstract conceptualization (one of SC’s lowest scoring poles) in question three, saying “I learned a lot about the interpretation of the piece.” This is evident also when reviewing the lesson. Each aspect of abstract conceptualization stretched SC to the point of understanding the piece better.

Kolb LSI Trumpet Lessons Questionnaire

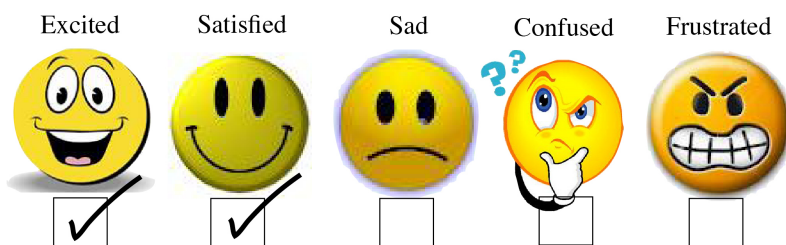
SC: Day Two, Lesson One 9-28-12

DATE: 9-28-12
METHOD: RSO **CRSO** C
P: 1 2 3 4 **5**
For Research Purposes only

NAME: Student C

Repertoire: Ewazen "Sonata for Trumpet": Movement I.

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Very well. Everything was explained well. I had fun playing too!

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned a lot about the interpretation of the piece.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

Not really, no.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT C Day Three, Lesson Two 10-26-12

Method: (RSO) RO-40 CE-30 AE-29 AC-24

C: Eric Ewazen – “Sonata for Trumpet”: Movement I, measures 1-27.

L: CE 1 & 2: “When you hear this piece or portion of piece, what do you see in your mind? and “Please sing and press corresponding valve down”. SC’s story evolved from the first session, becoming more elaborate. Sticking with the jungle theme shared in lesson one, SC described a very fast moving stream running throughout the jungle setting, picking up more speed as we get further into the piece. As soon as the Allegro Molto occurs, we start to run downhill and stuff and we have to jump over little rocks. Also very effective when teaching in this pole, was SC’s improvement in singing and fingering the opening to measure 27. Pitch identification improved. SC also incorporated musical nuances when singing, which was not the case during the first lesson. SC expressed “The intervals are easier and in general everything is more solid.”

RO 5: “Observe what is being played” When asked, “What did you observe” after listening to the recording SC shared,

“I love the sound of the recording, I like what he did in the double tonguing sections. I also like the different pattern of accents. None of the subtle nuances are written in the part. The first couple he would bring out, the next couple would be slightly softer.”

SC demonstrated the ability to identify the difference between Ray Mase’ sound and musical nuances, (dynamics, crescendos and decrescendos, articulation, phrases, etc.) by listening to the recording, then playing by self. While teaching in the reflective observation pole, SC was able to identify the difference between what was being heard as opposed to what was written on the page. When SC noted that what was heard was not written in the part, the importance in doubting was highlighted. The student will have the opportunity to bring more interpretation and musicality than what is merely written on the page.

AC 1 & 4: “What genre is this etude, solo or study?” and “What is the articulation or extending techniques and how are these techniques supposed to be played?” When discussing steps one, in relation to style, SC mentioned how the sound of the trumpet in this solo needs to be played with a contemporary perspective, rather than a jazz perspective. SC referenced the amount of jazz playing currently playing during the semester. Being the main focus for SC, the problem has been more so separating from playing with the jazz sound and articulation to performing it in the contemporary 19th century trumpet solo perspective. This directly informed aspect 4 of Abstract Conceptualization for SC. When asked, “How is this supposed to be played?” SC determined not the way originally played it in the jazz influenced tone and articulation, but rather in a contemporary flowing style Ray Mase performed. SC learned the importance in coming to each solo with a different mindset. For example, you don’t play jazz music with the same perspective and take as classical or contemporary trumpet literature.

AE 4: “Try (x) a different way” Upon listening SC play the first page, I realized the rhythm in measure 41 was incorrect. I chose to ask SC to experiment with these measures and the rhythmic pattern a totally different way. SC chose to play it very slowly at first. The second time with guided help from me, I encouraged SC to choose a note and only play the rhythm. After that, SC clapped

the passage, then played it, and then we subdivided the passage. Each way brought a different opportunity for SC to take it into the practice room and woodshed.

F: During the second lesson, I taught SC according to the Raw Score Order from the Inventory of the Kolb LSI. The overall performance rating I gave SC was a 5 due to the ability to adapt extremely well in each pole. There were also several moments of realization or what I like to call “ah-ha” points. SC marked both excited and frustrated (due to SC’s annoyance with a rhythm in measure 41) with the lesson and marked very motivated to practicing the material. In questions two and three, SC highlights benefiting the most from both the Abstract Conceptualization pole by answering, “I learned that different things are required for different solos (not just styles).” When asked how well SC was able to follow the lesson, the response eluded more so to what SC learned, saying, “Well, but I’m taking a vastly different approach than what’s needed.” This also highlights the connection to learning the most from Abstract Conceptualization.

Kolb LSI Trumpet Lessons Questionnaire

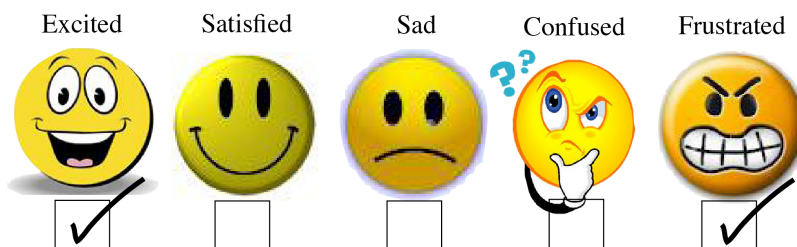
SC: Day Three, Lesson Two 10-2612

DATE: 10-26-12
METHOD: RSO CRSO C
P: 1 2 3 4 5
For Research Purposes only

NAME: Student C

Repertoire: Ewazen "Sonata for Trumpet": Movement I.

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Well, but I'm taking a vastly different approach than what's needed.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned that different things are required for different solos (not just styles)

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

I'm not sure that there is a better way to teach it, but that rhythm is still frustrating.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT C: Day Four, Lesson Three 11-9-12

Method: (CRSO) AC-24 AE-29 CE-30 RO-40

C: Eric Ewazen – “Sonata for Trumpet”: Movement I, measures 1 – 27

L: CE 2: “Please sing and press corresponding valve down” SC demonstrated an impressive ability to sing and press the corresponding valves with the correct notes. Compared to the first lesson, SC has improved greatly and become more confident. Consequently, every aspect of SC’s trumpet playing has become more secure and musical. Although the time spent on music has naturally aided in students improvement. The consistency in requiring student to sing and air finger their part during each lesson encourages improvement for the student as well.

RO 5: “Observe what is being played” A major breakthrough regarding SC’s perception of this solo came when I asked student to tell me what they observed after listening to the recording and what was being played. In regards to the last ending off note in measure five, “I was for some reason taking the intensity of the note played in measure 51 and bringing it to the beginning of the piece.” SC was allowing the notes, which were preferred (Alexander Arutunian Trumpet Concerto based sound) determine the entire tone used for the piece. This was an effective discovery for SC in that now, it was understood why they chose to play it the way they did, albeit incorrect.

AC 1: “What genre is this etude, solo or study?” Asking SC what genre the solo is during the third lesson provided a platform for discussion that had not already been evident during previous lessons. I would venture to guess this being because SC is more familiar with this piece and discussions in previous lessons are sinking in a bit more. SC was able to successfully think and reason through what genre Eric Ewazen’s is by saying when it was written. I also mentioned the influence Milton Babbitt and Gunther Schuller both had on Ewazen. Specifically, Ewazen wanted melody and harmony not as a-tonal or harmonically progressive as his teachers. Upon sharing this information, SC further commented, “This piece has never struck me as not being not about the melody, the whole piece is very melodically driven.” SC also expressed not liking the type of music that doesn’t highlight melody and harmony. The ability for this student to reason and think why the information and facts were important to this piece has become more sophisticated with each lesson together.

AE 2 & 4: “Tell me something I don’t know about this piece or about your trumpet playing in this piece” and “Try (x) a different way” **these** perspectives allowed a new way for SC to look at the rhythm, making it less intimidating. When I asked SC to “Tell me something I don’t know about this piece or your playing,” SC commented, “I kind of wish I could have more of an edge in my sound, compared to what this solo is requiring. I love the sound and intensity of Arutunian’s Concerto for Trumpet. I feel subdued when I have to play it like this.” When SC expressed this, I was able to discuss even though it is a different style than the Russian trumpet solo of Arutunian, just as much intensity of tone and energy must still exist in softer, lyrical playing. Being allowed to experiment with the rhythm in measures 41 – 42, SC experienced the successful execution of the rhythm originally presenting challenges. During teaching to the abstract conceptualization pole, SC experimented with the rhythm presenting difficulty in measure 41 - 42. Through clapping it, playing the first half, then second half, playing it on one note.

F: During the third lesson, I taught SC to the counter raw score order. The overall performance rating I gave SC was a five, due to the ability to adapt extremely well in each pole. In particular, SC demonstrated the ability to correctly play the rhythm in measure 41. SC marked both excited and satisfied with the lesson and marked very motivated to practicing the material. In questions two through four, SC expressed enthusiasm regarding getting a rhythm correct. As was the case in lesson two, SC benefited greatly from being taught in Active Experimentation. SC responded to question three with, “I learned that rhythm. Leaving out the downbeat was extremely helpful in hearing/feeling it properly.”

Kolb LSI Trumpet Lessons Questionnaire

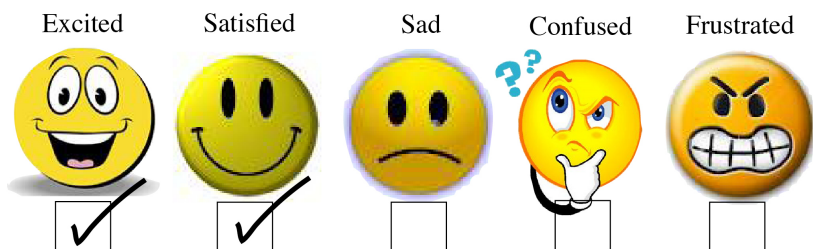
SC: Day Four, Lesson Three 11-9-12

NAME: Student C

Repertoire: Ewazen "Sonata for Trumpet": Movement I.

DATE: 11-9-12
METHOD: RSO **CRSO** C
P: 1 2 3 4 **5**
For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Very well. Finally understood that rhythm.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned that rhythm. Leaving out the downbeat was extremely helpful in hearing/feeling it properly.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

Nope. It all went very well.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
①	2	3	4	5	6

STUDENT C: Day Five, Lesson Four 11-16-12

Method: (RSO) RO-40 CE-30 AE-29 AC-24

C: Eric Ewazen – “Sonata for Trumpet”: Movement I, entire movement.

L: CE 2: “Please sing and press the corresponding valve down” In addition to singing measure 1 – 27, I incorporated buzzing as a real and tangible experience for SC. For the final lesson in my research, SC sang and buzzed the piece correctly, along with musicality, and subtle nuances of dynamics.

RO 1: “Listen to recording or me play this passage or piece” During the entire research process, I had intentionally not listened to the entire movement. I saved this for the last session, because I also wanted to include a discussion, which highlighted the form of the piece. This proved to be very effective for SC, in that I first incorporated characteristics from Reflective Observation. I chose aspect one of Reflective Observation because SC was able to first listen, reflect and observe what was being heard. Later in the lesson, the reflecting that was initially done in the first part of lesson was explained at the last part of the lesson.

AC 3: “What is the form of this piece? What is the composer getting at?” Step number three in abstract conceptualization offered a dynamic teaching tool when I based my teaching off of what the form of the piece was, or what was the composer getting at? As the teacher it is my job to direct the student in thinking. One way I provided a platform for SC to begin thinking about what the form of the piece was, I presented basic theoretical information regarding form for the first movement. For the theoretical discussion, I used Phil Wards Dissertation titled, “An examination of Richard Peaslee’s Nightsongs, Eric Ewazen’s Sonata for trumpet and piano, Antonio Carlos Jobim’s Desafinado, Horace Silver’s Peace, and Bronislaw Kaper’s Green dolphin street” (Ward, 2008, pgs. 38-39). From this, I presented basic theoretical information of the sonata form in the first movement of Eric Ewazen’s “Sonata for Trumpet”. SC expressed, in amazement that the terms used in the pieces of Mozart in theory class could be used in modern day trumpet literature in lessons. This connection SC made was one of the most prevalent realizations and it occurred when being taught to the lowest pole (AC-22).

AE 1: “What questions/comments do you have about this piece? Or what you heard?” I asked SC to tell me something about his/hers trumpet playing I wouldn’t know. SC expressed frustration regarding the tone being produced. This led to me asking questions which led to the discussion of warm-up. As an Undergrad, trumpet majors are pulled in several different directions, with a lot of playing expectations, commitments and responsibilities. Warm up is a critical part of the day, which has the potential in helping versus hurting the brass player. SC shared the current warm up, which consisted of solely loud playing, with no soft playing incorporated. Without the ability to ask students if they have questions, it is not as accessible to determine where certain issues may be stemming from.

F: During the fourth lesson, I taught SC according to the raw score order. The overall performance rating I gave SC was a five due to the ability to adapt extremely well in each pole. There were also several moments of realization or what I like to call “ah-ha” points. SC marked both excited and confused (due to SC’s new understanding that the information being learned in theory class is applicable to trumpet lessons). SC marked very motivated to practice the material after the lesson. Like several of SC’s lessons, SC demonstrated effective learning while being taught to the Abstract Conceptualization pole. SC highlights the challenge faced when being taught to the lower raw score pole of Abstract Conceptualization, saying, “I was more than a little perplexed by all the Sonata form theory terms.” On the same lines, when asked in question three what was learned in the lesson, SC shared, “I learned that when the composer titles it a Sonata, then that means it is actually a sonata, along with all the terms. I’ve never used those terms used outside of Mozart and Beethoven.” By incorporating elements of abstract conceptualization in teaching, SC was able to make connections that might not have been made before.

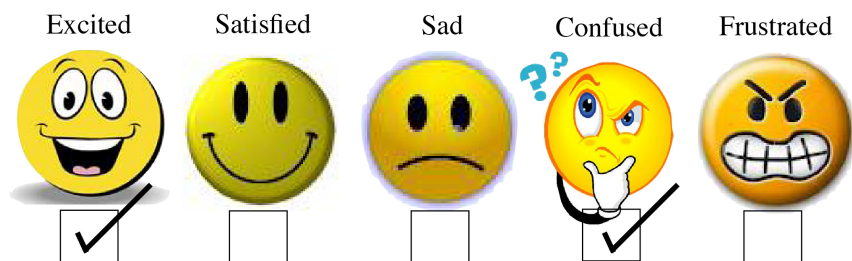
Kolb LSI Trumpet Lessons Questionnaire
SC: Day Five, Lesson Four 11-16-12

DATE: 11-16-12
 METHOD: **RSO** CRSO C
 P: 1 2 3 4 **5**
 For Research Purposes only

NAME: Student C

Repertoire: Ewazen "Sonata for Trumpet": Movement I.

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Very well, though I was more than a little perplexed by all the Sonata form theory terms.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned that when the composer titles it a Sonata, then that means it is actually a sonata, along with all the terms. I've never used those terms used outside of Mozart and Beethoven.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

Nope, not really. I feel pretty satisfied with what I learned.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
①	2	3	4	5	6

STUDENT C: Day Six, Discussion 11-16-12

Method: NA/ run through of repertoire plus discussion

Day six was used solely as a run through and discussion. Student C discussed thoughts regarding participation in research sessions. I have categorized the comments according to the four poles I feel they best represent. The following are Student C's comments.

Concrete Experience

"I learned a lot about hearing the intervals before playing them, it was extremely helpful".

Reflective Observation

Listening stands out as the most effective teaching for SC, which is not much of a surprise since this is the highest raw score order on SC's Kolb LSI. SC expressed, "Listening was one of the most effective aspects of the lessons".

Abstract Conceptualization

Thinking about the piece and formulating theories were very impressionable for SC. This was one of the lowest scoring poles for SC, and it provided useful information for improving and becoming a better learner. SC shared learning a lot from studying the form of the Ewazen Sonata, saying, "I learned the most when we went through the analysis of the Sonata Form, no doubt". SC goes on and says, "I guess that doing your theory homework really does help!"

Active Experimentation

Active Experimentation provided a good starting point in learning the rhythm in measure 41, however as SC expressed, "It did not make it more enjoyable".

APPENDIX F

STUDENT D: Day One - Baseline Day 9-17-12

Method: NA/ control day

Student D: Diverger/ Heart (<3)

Raw Score: CE 41 RO 28 AE 27 AC 24

Counter Raw Score: AC 24 AE 27 RO 28 CE 41

C: The literature for SD determined during the Baseline Day for the course of research was:

- “Carnival of Venice”- Jean-Baptiste Arban
- “Rustiques” – Eugene Bozza
- “Characteristic Study Number One” Jean-Baptiste Arban

Since SD was preparing for a recital in mid- October, we chose to work on both the recital repertoire (Arban, Carnival of Venice and Bozza, Rustiques). After the recital the Arban Characteristic Study number 1 was chosen for the lessons.

L: During the Baseline Day, I gathered SD’s understanding of the piece. The following are key areas of focus during the research:

- “Rustiques”, by Eugene Bozza
 - o Beginning – a Tempo

Moderato (senza rigore del tempo)

Vivo

a Tempo

- o fourth measure after Meno vivo to Tempo 1.



“Carnival of Venice” by Jean Baptiste Arban

○ Variation II

The above stated problem areas are the primary focus of the research lessons. However, in each lesson, certain areas may have improved or present new challenges for student. I determined which areas to focus on during each session, depending upon response to concepts or time.

F: I gave SD a performance rating of four, representing the overall handle on the material for the upcoming recital. Regarding the material, SD was hitting the proverbial recital preparation wall. Having lived with the material for months now, the inclusion of the Kolb LSI poles present an interesting and intriguing aspect to the study of repertoire already learned. SD marked satisfied when asked the overall attitude toward lesson while marking motivated to practice the material. I attribute this middle ground answer of motivated to mirror SD’s neutral perspective of the music which has been a part of the practice routine for months. Answers two through four are student’s general perspective of the lesson. Being the baseline day, I did not teach according the raw or counter raw score order of student.

Kolb LSI Trumpet Lessons Questionnaire

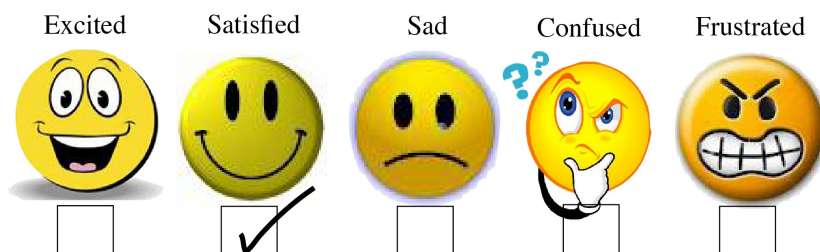
SD: Day One - Baseline Day 9-17-12

NAME: Student D

Repertoire: Arban – “Carnival of Venice”, Bozza – “Rustiques”,
Arban – “Characteristic Study No. 1”

DATE: 9-17-12
 METHOD: RSO CRSO **C**
 P: 1 2 3 **4** 5
 Baseline Day
 For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

I mostly played through a couple sections, and I didn't feel great about how I played them, and my sound wasn't totally warmed up, but I'm interested to see where it goes from here.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

Not really, but I just played through things since it was the first session.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

Not Applicable

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT D: Day Two – Lesson One 9-27-12

Method: (RSO) CE-41RO-28 AE-27 AC-24

C: The literature for SD determined during the Baseline Day for the course of research was:

- “Rustiques” – Eugene Bozza beginning to A Tempo. See baseline day for musical examples
- Fourth measure after Meno vivo to Tempo 1.

L: CE 1: “When you hear this piece or portion of piece, what do you see in your mind?” SD explains the images seen in the mind after I play a recording of the opening to A Tempo. SD shares, “It is not something that is solid. I guess I would explain it in a motions relating colors. The beginning is like regal but sensitive and beautiful representing a dark bluish purple. All the fast accented notes are bright red, orangish colors.” Although SD responded strongly to several Concrete Experience steps, the first step demonstrated just how important the aesthetical aspects are when learning music.

RO 4 & 5: “Listen carefully, I might just trick you so don’t answer too quickly” I played the opening to A Tempo as well as the Fourth measure after Meno vivo to Tempo 1. SD had listened primarily to a recording of Wynton Marsalis performing the piece. With this in mind, I chose two different recordings to play for SD: Wynton Marsalis and Judith Lynn Stillman on Piano, and Ole Edvard Antonsen and Wolfgang Sawallisch on piano to contrast or add a new perspective. I asked student to “listen carefully, I might just trick you so don’t answer too quickly” followed with “observe what is being played” and tell me what you observed. SD observed the tone quality of the opening statement and highlighted the centered tone of Wynton Marsalis, while the second section, SD noted the tones had a type of catch or firm beginning throughout the fast passage. These observations have the potential in informing the musician to be more musical or discerning.

AC 4: “What is the articulation or extending techniques and how are these techniques supposed to be played?” Overall, SD was not comfortable when taught in the abstract conceptualization pole. Despite the discomfort, SD and I discussed the articulation markings and how they should be played. Understanding what the student is comprehending about articulation can explain why they are playing certain elements in the music. From here, I can guide and or redirect what the student is doing. SD shared the opinion regarding articulation saying, “Accent markings are big and not quite bell tones, but bitey. A lot of the staccato he gives at the end of slurs are more of a lift. The tenuto markings are not necessary connected but more bell tones.” I am also able to connect articulation concepts to the genre of the music, stating in step one of Abstract Conceptualization. SD reflects how effective incorporating elements of AC was in Questionnaire question three saying, “I learned that rather than “not thinking” to stop nitpicking, thinking about something else (like articulation or imagery) can help me add new life to the music, since I’ve been practicing it so long.”

AE 2 & 4: “Tell me something I don’t know about this piece or about your trumpet playing in this piece” I asked student to “Tell me something I don’t know” about the piece or their trumpet playing, and SD shared thoughts regarding what was observed from the recordings. SD replied, “There are a lot of stylistic things I didn’t realized I developed about the piece in my own head. I spent a lot of time listening to Wynton. It is interesting going back and listening to it after so long of practicing this piece. I guess I have developed another sense of where I think the music should go. This makes me feel better and my confidence in this piece.” This is valuable information for a teacher to understand. It is important for students to be discerning musicians.

When SD tried something new and experimented with the opening material, SD stretched each notes and phrases out more. In addition, SD said, “I was trying to see in my head the color images that I was describing for and that actually helped a lot.” Although being very low in active experimentation, SD was able to become more musical when encouraged to learn by just “doing”.

F: I gave SD a performance rating of four, representing the overall handle on the material for the upcoming recital. There were several simple easy errors made, and several of the passages played were glossed over. Regarding the material, SD was hitting the proverbial recital preparation wall. Having lived with the material for months now, the inclusion of the Kolb LSI poles present an interesting and intriguing aspect to the study of repertoire already learned. SD marked satisfied when asked the overall attitude toward lesson while marking motivated to practice the material. I attribute this middle ground answer of motivated to mirror SD’s neutral perspective of the music which has been a part of the practice routine for months. Answers two through four are student’s general perspective of the lesson. Being the baseline day, I did not teach according the raw or counter raw score order of student.

Kolb LSI Trumpet Lessons Questionnaire

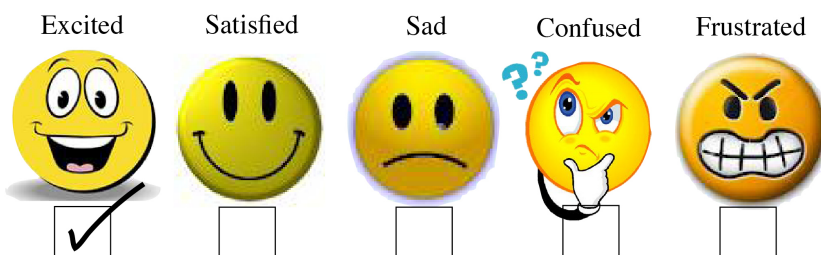
SD: Day Two, Lesson One 9-27-12

NAME: Student D

Repertoire: Bozza "Rustiques"

DATE: 9-27-12
METHOD: **RSO** CRSO C
P: 1 2 3 4 **5**
For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Very well, the colors/images helped me stop thinking about individual notes and get into the feeling more, which is what I wanted.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned that rather than "not thinking" to stop nitpicking, thinking about something else (like articulation or imagery) can help me add new life to the music, since I've been practicing it so long.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

Only about other sections of the piece maybe and being able to focus on those, but I think I learned some good concepts today to take back to the practice room. It was almost just what I needed at this point in my preparation.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT D: Day Three, Lesson Two 10-19-12

Method: (CRSO) AC-24 AE-27 RO-28 CE-41

C: The literature for SD determined during the Baseline Day for the course of research was:

“Carnival of Venice” – Jean Baptiste Arban
Variation II triple tongue passage

L: CE 4: “How have you changed as a trumpet player or how has your trumpet playing changed?” SD identified a lot with step four, which focuses on the progression of life. Allowing SD realize how far they have come right before the recital solidifies the improvement, dedication and discipline it took to get to this point of the process. SD is ready to perform this music and understands what it has taken to be prepared.

RO 5: “Observe what is being played” SD noted my smoothness of triple tonguing that they wanted to strive for when playing this variation. Reflective Observation is a very effective tool when wanting students to incorporate stylistic changes or subtle nuances in the music. Scoring lower in Reflective Observation, this challenges SD to understand what is really being heard when listening to playing examples.

AC 1: “What genre is this etude, solo or study?” When asked, “What genre is this piece?” SD was not able to answer specifically. However, SD understood what setting the music was written for, saying “this piece was written in a time where band members were being highlighted as solo performers.” The intellectual or mental aspect of playing the trumpet goes hand in hand when performing. Understanding the context of the piece can inform the performance.

AE 4: “What are you unsure about?” SD had a difficult time when experimenting with variation II. This step in Active Experimentation challenged SD, however it created for an effective way to practice. After experimenting with measure 17 – 25 playing it as written was better. The following are the ways SD experimented:

- Slurring all and holding the sixteenth triplet on the same tone
- Over exaggerating the accents
- Experimented with dynamics, getting softer at the top of the phrase, total opposite

Many times, when we experiment with musical passages, we make it harder than it is written. So, when returning to the written music, it can seem easier.

F: I gave SD a performance rating of two due to the resistance given when teaching. I would have considered it being frustration because I taught to SD’s counter raw score order, however SD was one day away from the recital. SD marked satisfied when asked the overall attitude toward the lesson while marking motivated to practice the material. Since recital was one day away and SD would not be expected to practice recital material as would in a normal day, SD felt neutral towards the motivation level to practice. Answer four mirror the students acknowledgment of being resistant during the lesson, saying “I feel I could have had a more open mind and accepted what was presented to me rather than fighting with the thoughts in my own head.” I was enthusiastic in the answer SD provided in question three regarding what was learned in the lesson, saying, “I think it was a reinforcement of many things I already knew, but it’s always helpful to have reminders.” The four poles create an excellent atmosphere even a day before a recital.

Kolb LSI Trumpet Lessons Questionnaire

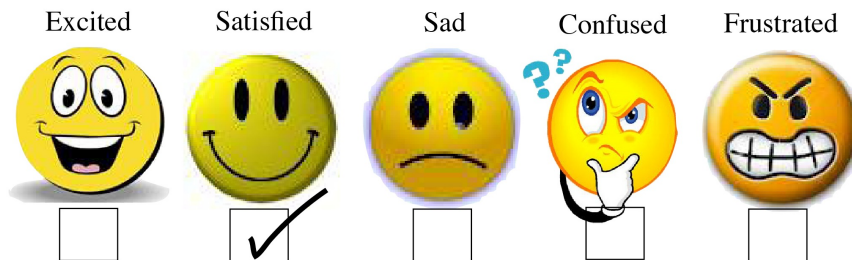
SD: Day 3 – Lesson Two 9-27-12

NAME: Student D

DATE: 10-19-12
METHOD: RSO **CRSO** C
P: 1 **2** 3 4 5
For Research Purposes only

Repertoire: “Carnival of Venice” – Jean-Baptiste Arban

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

It was easy to follow what was being said and taught, but I have to take more time for my own mind to settle before I can really take everything in.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I think it was a reinforcement of many things I already knew, but it's always helpful to have reminders. It's hard to say I would have expected to learn much this close to my recital.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

I feel I could have had a more open mind and accepted what was presented to me rather than fighting with the thoughts in my own head.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT D: Day Four, Lesson Three 10-26-12

Method: (RSO) CE-41 RO-28 AE-27 AC-24

C: The literature for SD determined during the Baseline Day for the course of research was:
Arban “Characteristic Study #1”

L: CE 2: “Please sing and press the corresponding valve down” Upon initially playing the etude; SD was not hitting the center of each tone. Arban’s First Characteristic study presents the trumpet player with scales and large intervallic leaps while playing sixteenth notes. It was clear after listening to SD sing the notes were not engrained in the head. SD was challenged when asked to sing and finger the first section (ms. 1-12) of the etude. We slowed the tempo down considerably while SD sang and I gave sporadic pitch references. Although SD had been playing this etude for quite some time, SD demonstrated improvement by realizing the importance of recognizing each sixteenth note at the center of the pitch.

RO 3: “Think about what you are hearing but wait to tell me what you think” I provided simple reading material for SD regarding Jean-Baptiste Arban and the Arban Method. I consulted Wikipedia as my sources for quick reading. This became the starting point for discussing the art of cornet playing, the construction of the cornet and how it is played: how it differs from the trumpet. Much if not all the material was new to SD. (http://en.wikipedia.org/wiki/Arban_method)

AC 1: “What genre is this etude, solo or study?” Just like when being taught in the active experimentation pole, SD connected concepts learned from the reflective observation pole when being taught and asked questions in the abstract conceptualization pole. This aspect drew upon the reading presented in reflective observation, step three. SD was able to have knowledge to answer, “What genre is this etude/study?”

AE 1: “What questions/ comments do you have about this piece? Or what you heard? After I asked SD “What questions/comments do you have about this piece?” SD replied by asking, “Would any of this [the etude] be played differently on a cornet?” This demonstrated the immediate connection SD made from the information gathered in the reflective observation pole, allowing for a broader knowledge base discovered by SD that was not originally in place.

F: I gave SD a performance rating of four as a result of marked improvement and response to each concept discussed and taught. By teaching to students raw score order, SD was satisfied toward the lesson while marking somewhat motivated to practice the material outside the lesson. I attributed this to the fact SD had re-visited this etude from freshman year in practice sessions by themselves. When asked in question four if SD could have learned something better in this lesson?” SD responded by saying, “I learned something when I wasn’t expecting to.” Incorporating key concepts from the four poles characteristics provided a new perspective, creating moments of “Ah-Ha” for the student.

Kolb LSI Trumpet Lessons Questionnaire

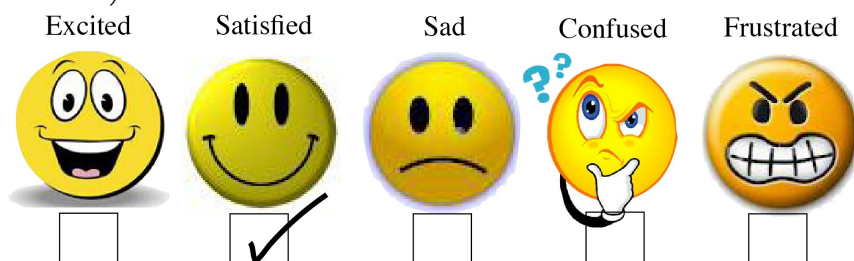
SD: Day Four, Lesson Three

NAME: Student D

Repertoire: Arban "Characteristic Study #1"

DATE: 10-26-12
 METHOD: **RSO** CRSO C
 P: 1 2 3 **4** 5
 For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Interesting to look at an old etude. Gave new perspective to playing but my focus made me think too hard and play less right notes but perhaps with better style.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned mostly about the cornet style and realized that everything in the Arban book is meant for that. I feel pretty content with what I learned, and I feel that in some way I improved.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

I feel like there's not a lot to learn about this song and all the technique. I used to feel like I know my faults so not really, especially since I learned something when I wasn't expecting to.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT D: Day Five, Lesson Four 11-9-12

Method: (CRSO) AC 24 AE 27 RO 28 CE 41

C: The literature for SD determined during the Baseline Day for the course of research was:
Arban “Characteristic Study #1”

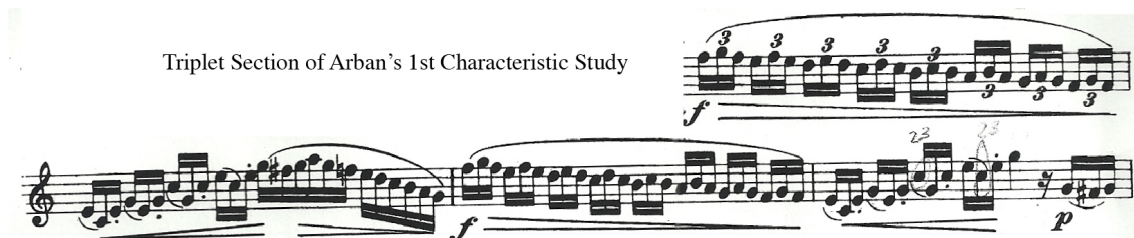
L: CE 2 & 4: “Please sing and press the corresponding valves down” and How have you changed as a trumpet player or how has your trumpet playing changed?” SD sang while pressing the corresponding valves down from measures five through seven while I gave pitch references. After singing through it, SD then played it. Both the center of the note and direction in the trills and phrases improved significantly.

When asked in step four of concrete experience, “Remember last week, how have you changed?” SD replied, “My style has gotten better and I am making more of the phrases, and articulations connected.” SD also mentioned since last playing this study as a Freshman, it makes sense that it should not be played as a Freshman anymore, but rather bring the growth and maturity of two years.

RO 5: “Observe what is being played” what did you observe? SD replied by saying, “It sounded like it flowed better in the trill sections.” SD observed that the notes were more connected, not just note-to-note.

AC 3: “What is the form of this piece? What is the composer getting at?” We discussed the style marking of Allegro Moderato, where the quarter note equals 96. I had SD play the beginning through measure 14 with the metronome at 96. SD played the beginning to measure 12 on beat. Going into the measures of triplet sixteenths beginning in 13, the tempo was not kept. From here we discussed the importance of weighing what the composer suggests for tempo with what the performer can play with clarity. A good barometer when picking tempos are finding the fastest passages, for instance measure 13 -16, determine the tempo.

Measures 13-16, letting the triplets determine tempo.



AE 1 & 4: “What questions/comments do you have about this piece? Or what you heard?” and “Try (x) a different way” In response to question one, “What questions or comments do you have about the piece or playing?” SD replied, “I fumble on my trills and I don’t know how to time them.” I told SD that when practicing with a metronome, you are able to discover inconsistencies in tempo. By practicing with a metronome there may be moments the metronome pushes you or you push the metronome.

Arban Characteristic #1 measures 5-6



In step four, I asked student to try the trill in measures five and six a different way. SD presented difficulty in understanding how to experiment, with guided help; I encouraged SD to experiment the following ways:

4. Hold the half note out without the trill and only incorporate the turn with the metronome.
5. The sixteenth turn was not clean so then we isolated the turn to make each note speak. First we tongued it, and then slurred it.
6. We then experimented with only trilling the half note, but not turning the last part.

After these experiments, the results were excellent and timing was perfect.

F: I gave SD a performance rating of five for the improvement during the lesson, along with the adaptability demonstrated to the different poles. I taught according to the counter raw score order during the last research session. SD marked satisfied regarding attitude towards the lesson and motivated to practice the music outside of the lesson. Important to note are the answer SD provides for both question one and two. Both answers point towards the benefits in being taught in the active experimentation pole. In response to how well SD was able to follow the lesson, SD replied with “I felt I actually improved on the study this time, especially on the trills.” Question two SD responds to what they learned with, “I learned new techniques to work on trills, and general style for cornet repertoire.”

Kolb LSI Trumpet Lessons Questionnaire

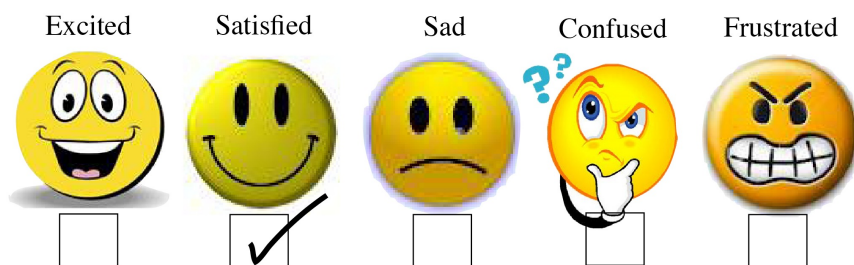
SD: Day Five, Lesson Four 11-9-12

NAME: Student D

Repertoire: Arban "Characteristic Study #1"

DATE: 11-9-12
METHOD: RSO **CRSO** C
P: 1 2 3 4 **5**
For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

I felt like I actually improved on the study this time, especially on the trills. Everything was very comprehensive.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned new techniques to work on trills, and general style for cornet repertoire.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

I feel like I could have more fully taken in how to improve these things, but that more me than you.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT D: Day Six, Discussion 11-16-12

Method: NA/ run through of repertoire plus discussion

Day six was used as a run through music and a teacher student discussion. Student D discussed their thoughts regarding participation in research sessions. I have categorized the comments according to the four poles I feel they best represent. The following are Student Ds comments.

The two lower poles provided SD an opportunity to connect information in a succinct way. SD connected information from the active experimentation and abstract conceptualization poles naturally. Being challenged in these poles created an opportunity to connect information quicker and became more applicable to learning the music.

Concrete Experience

Student D highlighted the concrete experience pole as the greater learning pole. SD identifies as being a very visual learner and emotionally driven student. Feeling effects SD's learning experience and is highly sensitive to surrounding circumstances when learning. Knowing this as a teacher is important so I can challenge SD in the lower poles to stretch the student's learning experience.

Reflective Observation

SD recognized being very visual when learning. "I am definitely a visual and emotional learner and that I think way too much while playing so that my mood that day would really effect how I play and learn."

Abstract Conceptualization

SD did not reference abstract conceptualization during the lesson, however I observed several instances during the research lessons where SD benefited from being taught to this pole.

Active Experimentation

Although SD did not reference active experimentation during the exit interview, several instances exist during the research lessons where SD benefited from being taught to this pole.

APPENDIX G

STUDENT E: Day One - Baseline Day 9-21-12

Method: NA/ control day

SB: Converger/ Question Mark (?)

Raw Score: AE 42 AC 33 CE 24 RO 20

Counter Raw Score: RO 20 CE 24 AC 33 AE 42

C: *The literature for SE determined during the Baseline Day over the course of research:

- Bousquet “Etude #3”
- John Prescott: “Sonata no. 3 for Trumpet” (Selections from movement I)
- Tonguing/articulation
- ***All musical examples taken from SE’s copy of solo used throughout study.**

L: During the Baseline Day, I gathered SE’s understanding of both the Bousquet “Etude #3” and Prescott “Sonata no. 3 for Trumpet”.

Bousquet etude #3:

- The descending fourth pattern for two octaves is the most difficult area in the etude.

Bousquet “Etude #3”. Highlighted challenging fourth pattern



- Broad challenges: SD expressed wanting more of an overall flow and not stopping when coming across this passage. SD shared, “I enjoy the lyrical aspect of it and that it can be fun to play while still learning fundamentals and core structure of the piece.”

F: Since SE did not have the trumpet in this session; I gave a performance rating of a one. I chose to include this session despite not having the trumpet due to the information gleaned about student’s thoughts and understanding of the piece. I taught an additional lesson on 11-14-12 to make up for the missing lesson. SE is very intellectual and demonstrates an awareness that goes into the trumpet playing quite effectively. Being considerably high in both active experimentation and abstract conceptualization, it will be interesting to observe if teaching SE in the lower scored poles (concrete experience and reflective observation) might improve trumpet playing. SE marked satisfied about the lesson and very motivated regarding the level of motivation to practice after the session.

Kolb LSI Trumpet Lessons Questionnaire

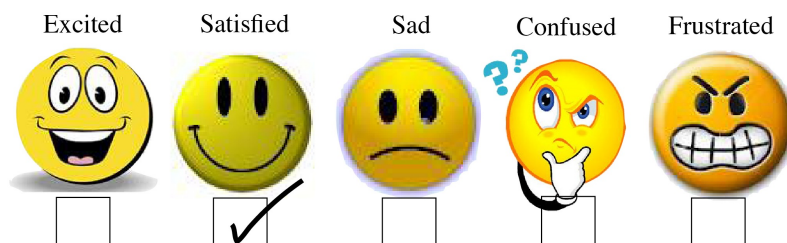
SE: Day One - Baseline Day 9-21-12

NAME: Student E

Repertoire: Bousquet "Etude #3"

DATE: 9-21-12
METHOD: RSO CRSO **C**
P: **1** 2 3 4 5
Baseline Day
For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

It was very easy to follow. Atmosphere is friendly, relaxed.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned about the process of this study, and after some reflection on the Bousquet I realized where my problem areas are.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

Yes, only because I forgot my instrument.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

Method: (CRSO) RO-20 CE-24 AC-33 AE-42

L: CE 1 & 2: When you hear this piece or portion of piece, what do you see in your mind?” and Please sing and press the corresponding valve down” SE provided a story line when asked “when you hear this piece, what pictures do you see in your mind?” SE suggested this piece fits more background music, rather than the forefront. In addition, SE mentioned how this piece also feels like it is telling a story line of a cartoon.

SE demonstrated a precise and secure handle singing while pressing the corresponding valves down from the beginning to measure 18. However when reaching measure 19 and 20, the same measure mentioned on the baseline day, the singing was not as secure or on pitch. From the tangible experience step two of concrete experience provides, SE was able to identify which pitches were most difficult. From here, we worked on these two measures, becoming better at singing the intervallic leaps of perfect fourths and tri-tones. Recognizing the ability to sing and play are directly related proved valuable for this student.

[illegible]

Allegro moderato Highlighted areas tongued Added Rubato

The image shows a musical score for a piece in 3/8 time, marked 'Allegro moderato'. The score is written on two staves. The first staff begins with a treble clef, a key signature of one sharp (F#), and a 3/8 time signature. The music consists of eighth and sixteenth notes, with some beamed sixteenth notes. The second staff continues the melody. Yellow highlighting is applied to specific groups of notes: the first eighth note of the first staff, the last eighth note of the first staff, the first eighth note of the second staff, the last eighth note of the second staff, and the first eighth note of the third staff. Red annotations are present: 'Highlighted areas tongued' is written above the first staff, and 'Added Rubato' is written above the second staff. The tempo 'Allegro moderato' is written at the top left.

From this playing example, SE observed the changing in the articulation and added rubato. SE became more aware in different interpretations and also made mention of the light tonguing.

AC 2 & 3: “What do these symbols, articulations, etc., mean in this piece? Mark your part with tricky spots, note combinations, etc.” and “What is the form of this piece? What is the composer getting at?” SE thrived the most when asked questions in the abstract conceptualization pole. SE provided a clear understanding of the theoretical elements and construction of the etude, as well as subtle nuances in the music hoped to achieve. Tricky sections marked can be seen in measures 19 with special attention drawn to the tri-tone, and measure 31-32 tricky patterns. In measure 44, SE points out the random triplet marking seen only once throughout the entire etude.

SE marks the following for the form of the piece

A section: 1-19
Development: 21-26
B section: 27-42
A Prime: 43-51
Coda: 51 – end

SE recognizes articulation markings in measures 21-24. In measure 23-24, SE also writes a crescendo as a subtle nuance.

AE 3: “Ask me a question or make a comment about the musical piece, or playing” When I asked SE to make a comment or ask me a question, SE immediately asked why I had played three different styles in the beginning of the lesson, asking, “What was the thing when you played it three different times?” Consequently, this was during the time when I was teaching to one of the lower scoring poles, reflective observation. By SE discussing this during this time, it demonstrated the ability for SE to reflect during the lesson and bring back important and valid questions students have during the lessons.

F: I gave SE a performance rating of four, representing the overall handle on the material. There are still several areas that need more work. However, there are great things happening and progress is being made. SE marked excited about the lesson and very motivated to practice the material outside of the lesson. Answers two, three and four are SE’s general perspective of the lesson. SE expressed, “I learned to approach music from different angles than I had before. I enjoyed learning methods to help achieve the sound/musical idea I want.” The different angles SE spoke of were the concepts found in the lower poles, i.e., reflective observation and concrete experience.

A
Allegro moderato

3

19 Tri-Tone

21 Development

27 B

31

43 A Prime

51 Codetta

Kolb LSI Trumpet Lessons Questionnaire

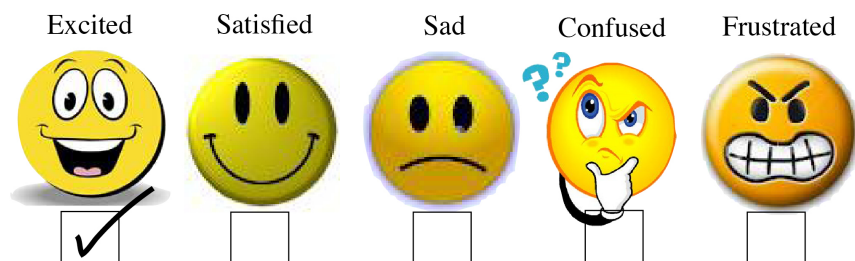
SE: Day Two, Lesson One 9-26-12

NAME: Student E

Repertoire: Bousquet "Etude #3"

DATE: 9-26-12
METHOD: RSO **CRSO** C
P: 1 2 3 **4** 5
For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Very well, it was clear what the objectives were.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned to approach music from different angles than I had before. I enjoyed learning methods to help achieve the sound/musical idea I want.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

No, it seemed well covered.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
①	2	3	4	5	6

STUDENT E: Day Three – Lesson Two 10-18-12

Method: (RSO) AE-42 AC-33 CE-24 RO-20

C: The literature for SE determined during the Baseline Day for the course of research was:

- Bousquet “Etude #3”
- **(All musical examples taken from SE’s copy of solo used throughout study.)**

L: CE 1 & 2: “When you hear this piece or portion of piece, what do you see in your mind?” and “Please sing and press the corresponding valve down” In response to step one in Concrete Experience, SE shared the following images in mind when listening to the first eight measures. “I saw two people on a trapeze, one initially in the beginning, then in measure six another person joined. The second half of measure seven were the trapeze artists doing a flip off of the trapeze.”

After SE shared the story of the trapeze artists, I had SE sing while pressing the corresponding valve with the same passages I played. I encouraged SE to sing the images expressed in step one. SE demonstrated a lilting quality when singing and carried this same interpretation when playing the trumpet.

RO 5: “Observe what is being played” I played through the etude, with specific emphasis on providing the eighth notes with what I like to call, “breadth”. I directed SE’s listening to these eighth notes and then asked SE to play through the etude with everything discussed in the lesson including, form, trilling techniques, images drawn upon along with singing through the trumpet. Taught at the end of the lesson, reflective observation provided SE an opportunity to bring everything together. SE performed the etude with a broader and more sophisticated handle of the style and technique required to play the Bousquet “Etude #3”. This particular attention to details in lessons can transfer not only to SE’s individual practice time, but also during ensemble playing.

AC 2 & 3: “What do these symbols, articulation etc., mean in this piece? Mark your part with tricky spots, note combinations, etc” and “What is the form of this piece?” When teaching in the abstract conceptualization pole, SE was able to further develop the form of the piece, discussing the subtle nuances and differences between the sections labeled the week prior. With limited dynamic markings in the etude, this pole serves as an excellent platform to discuss nuances of music. SE interpreted section to be softer than the A prime section. I however advised SE the A section should be introduced at a dynamic level that makes a statement, a forte marking for instance, then determining the final dynamic from these markings.

AE 2, 3 & 4: “Tell me something I don’t know about this piece or about your trumpet playing the piece” and “Ask me a question or make a comment about the musical piece, or playing” and “Try (x) a different way” When I asked SE to “tell me something I don’t know about either their playing the solo or trumpet” in step two, SE said, “I have been working on my tonguing so maybe that will come through. I have been specifically working on clarity and style.” In addition, when requesting the student to “ask me a question or make a comment about the solo or trumpet playing, SE said, “I hope this time through the etude I will be able to demonstrate a more articulate and separated approach to articulation.” I encouraged student to “try a portion of the etude differently”. SE chose to mix articulation up by slurring all the moving passages throughout the entire etude. After finishing, SE expressed how difficult it was to slur the etude and really made it more important to concentrate.

Bousquet etude #3 slurring example



Also in step four of active experimentation, we isolated the trill in measure 25, seen below. I guided SE through four specific experiments to better execute the trill with precision and clarity:

Bousquet Etude #3 Measure 25



1. Hold out the dotted half note and only play the three sixteenth notes leading into measure 26.
2. Hold dotted half note, take slur out and tongue the first of the three sixteenth notes leading into measure 26.
3. Incorporate tie back in while pulsing eighth notes from A to B. On beat six, tongue the first of the three sixteenth notes leading into the downbeat of measure 26.
4. Play quick trill and lightly tongue the first of the three sixteenth on beat six.
5. Now play as written

After doing these experiments with the trill passage, SE was able to successfully perform the trill in the context of etude.

F: I gave SE a performance rating of five, representing the overall handle on the material and response and adaptation to the concepts of each pole. During lesson two, I taught according to SEs raw score order. SE marked excited about the lesson and very motivated to practice the material outside of the lesson. Answers two through four are student's general perspective of the lesson. In response to how well SE was able to follow the lesson, SE expressed confusion in one of the higher scoring poles, Active Experimentation, saying, "Very well – A couple of misunderstandings, but cleared up. There was confusion on exact technique – tonguing/trying something different." In question three however, SE highlighted learning new interpretations that focus on both the concrete experimentation and active experimentation poles.

Kolb LSI Trumpet Lessons Questionnaire

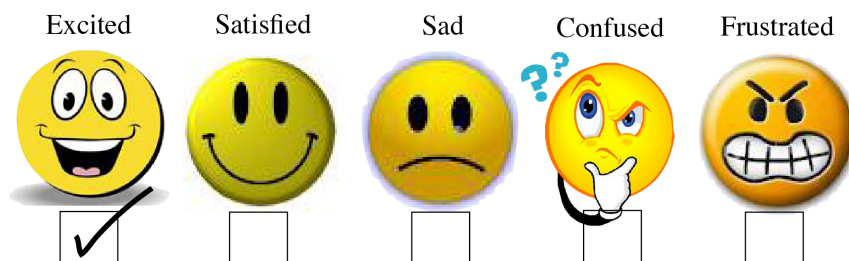
SE: Day Three, Lesson Two 10-18-12

NAME: Student E

Repertoire: Bousquet "Etude #3"

DATE: 10-18-12
METHOD: **RSO** CRSO C
P: 1 2 3 4 **5**
For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Very well – A couple of misunderstandings but cleared up. There was confusion on exact technique – tonguing/trying something different.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned how to trill properly. I learned how to mix interpretations.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

No. I learned more than I thought I could after studying the work for a few weeks.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
①	2	3	4	5	6

STUDENT E: Day Four – Lesson Three 10-26-12

Method: (RSO) AE-42 AC-33 CE-24 RO-20

C: The literature for SE determined during the Baseline Day for the course of research was:

- John Prescott: “Sonata no. 3, op 68” for Trumpet (Selections from movement I)

L: CE 1 & 2 “When you hear this piece or portion of piece, what do you see in your mind?” and “Please sing and press the corresponding valves down” SE responded very well to concrete experience in general. The most salient aspects were both one and two. When asked, “What pictures do you see in your mind” after I played the first page, SE responded with, “It feels ancient, almost reminiscent of Rome. It doesn’t sound happy, but more so heroic and epic.” In response to step two of concrete experience, SE demonstrated marked improvement after singing and pressing the corresponding valves down as I provided the reference pitches.

RO 5: “Observe what is being played” SE observed the difference between my accents in the beginning, as well as the difference between the lyrical and more mechanical aspects of phrase. For example, from measures 11-15 the slur marks represent a lyrical side whereas the tongued, more technical.



We discussed that accents in this piece must present more of a round and full sound rather than attack, with no substance. It must be less harsh. Also attributing to the tone being less harsh was instructing SE to “warm the air”, which made the tone present and darker and slurs more lyrical.

AC 1: “What genre is this etude, solo or study?” I discussed with SE that Prescott drew from several different trumpet solos when writing Sonata no. 3 for Trumpet, including: Kent Kennan’s “Sonata for Trumpet and Piano”, Third movement of Eric Ewazen’s “Sonata for Trumpet.” Upon hearing this information, SE connected certain elements found in each solo, including:

- Rhythmic similarities, i.e., mixed meter
- Melodic recognition
- Tempo influences
- Intervallic similarities (fifths and fourth leaps seen in Kennan)

AE 1: “What questions/ comments do you have about this piece? Or what you heard?” I asked SE to make a comment or ask a question regarding playing the trumpet, or about the solo. SE replied by asking, “Does the eighth note stay constant during the mixed meter?” SE was allowed the opportunity to ask an important musical question, which would inform the initial run through during the lesson. I was able to instruct SE that yes, the eighth note does remain constant throughout the mixed meters, however emphasizing the changes in meter.

F: I gave SE a performance rating of five, representing overall response and adaptation to the concepts of each pole along with improvement on the trumpet. SE marked excited about the lesson and very motivated to practice the material outside of the lesson. Important to note is SE’s answer to question four. In response to asking “Is there something you feel you could have learned better in this lesson?” SE replied, “No. Sarah pushed my musical ability/interpretations and I feel as though I am better already.” This answer highlighted the benefits student experienced when taught to the lower pole of concrete experience and reflective observation.

Kolb LSI Trumpet Lessons Questionnaire

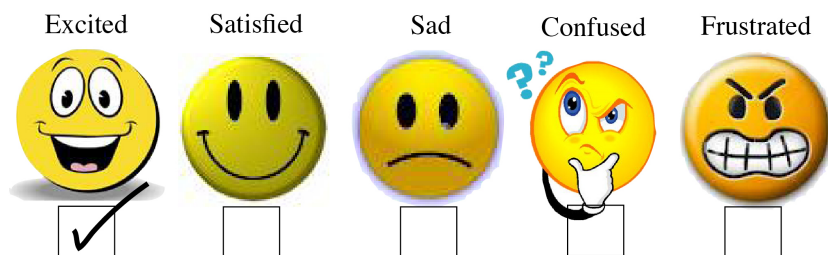
SE: Day Four, Lesson Three 10-26-12

NAME: Student E

Repertoire: Prescott "Sonata no. 3"

DATE: 10-26-12
 METHOD: **RSO** CRSO C
 P: 1 2 3 4 **5**
 For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Very well. Sarah made everything very clear. Every change she had me make was easy to understand and made musical sense.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned how to play the beginning less harsh. I feel as though this has helped my overall understanding of the first movement.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

No. Sarah pushed my musical ability/interpretations and I feel as though I am better already.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
1	2	3	4	5	6

STUDENT E: Day Five, Lesson Four 11-14-12

Method: (CRSO) RO-20 CE-24 AC-33 AE-42

C: John Prescott: “Sonata no. 3” for Trumpet (Selections from movement I)

L: CE 1: “When you hear this piece or portion of piece, what do you see in your mind?” SE responded strongly to step one in concrete experience. When asked to describe what pictures SE saw in the mind when listening to me play the first page, SE described the sound to reflect a kind of “call to arms” in the very beginning, as well as the runs.” I then asked SE to play the first page and use this image and concept as inspiration. Instantly, there was a change in sound, which reflected a more heroic entrance with a better handle of the notes. As evident in this example, when students are allowed to focus only on one image to paint when playing, the musical product can be more convincing.

RO 5: “Observe what is being played” Step five of reflective observation provided SE an opportunity to reflect on what solos Prescott drew from. I played both the Kennan Sonata for trumpet and Eric Ewazen’s Trumpet Sonata. Although we covered this information verbally in lesson three, SE reflected on both the verbal instruction from lesson three to the actual recordings during this lesson. This repetition during lessons is also a critical aspect of student’s learning. Following up verbal instruction with sound recordings to back this information up helped solidify and allow the information to become common knowledge to SE.

AC 1: “What genre is this etude, solo or study?” When teaching to the abstract conceptualization pole, we discussed the background of the piece including the following:

- written in 2010 in honor of Roger Stoner, the trumpet teacher at the University of Kansas from 1973 to 1987.
- Written for trumpeter, John Lewis.
- For collegiate undergraduate level
(Prescott, 2010, preface)

AE 4: “Try (x) a different way” When I asked SE to experiment with measure 79 through 93, SE experimented with articulation in the following ways:

- During the first time through, SE tried to make the articulation more linear by playing everything legato
- The second time, SE experimented by making the phrase more articulated yet with more weight.

By experimenting SE chose to incorporate the different type of tonguing practiced throughout the week. This allowed SE to play two examples back-to-back, understanding which one worked better. In return, SE is learning the solo better through playing more than what is on the page.

F: I gave SE a performance rating of 5, representing overall response and adaptation to the concepts of each pole along with improvement on the trumpet. During lesson four, I taught according to SE’s counter raw score order: CRSO: RO 20 CE 24 AC 33 AE 42. SE marked excited about the lesson and very motivated to practice the material outside of the lesson. When asked in question three of the questionnaire, “What did you learn today?” SE responded by saying, “I learned how to apply an image and turn it into a musical statement. Visualizing the “Call to arms” was very effective.” This highlights one of SE’s lower scoring poles, concrete experience focusing on step one, which incorporates the aesthetical and sensorial aspect when learning.

Kolb LSI Trumpet Lessons Questionnaire

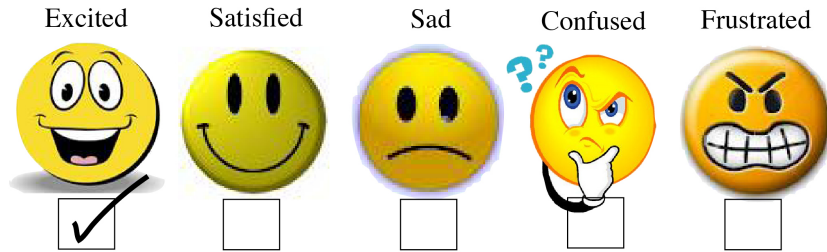
SE: Day Five, Lesson Four 11-14-12

NAME: Student E

Repertoire: Prescott "Sonata no. 3"

DATE: 11-14-12
 METHOD: RSO **CRSO** C
 P: 1 2 3 4 **5**
 For Research Purposes only

1. My attitude toward the lesson today (you may check more than one).



2. How well were you able to follow this lesson today? Please explain in detail.

Very well. All the directions and musical intent were made clear. I understand the concepts.

3. What did you learn today? Please explain in some detail. If you don't feel you learned anything, why? Also please explain why or what you have liked to learn.

I learned how to apply an image and turn it into a musical statement. Visualizing the "Call to arms" was very effective.

4. Is there something you feel you could have learned better in this lesson? Why, or why not?

No, we went over things thoroughly.

5. How motivated are you to **practice the piece we worked on today within the next week** because of the lesson today? (Please circle the appropriate number.)

Very Motivated	Somewhat Motivated	Motivated	Neutral	De-Motivated	Not at all Motivated
①	2	3	4	5	6

STUDENT E: Day Six, Discussion 11-16-12

Method: NA/ run through of repertoire plus discussion

Day six was used as a run through music and a teacher student discussion. Student E discussed their thoughts regarding participation in research sessions. I have categorized the comments according to the four poles I feel they best represent. The following are Student Es comments.

In response to being asked in question number five, “When did you feel you learned the most?” SE said, “While practicing concepts on the trumpet immediately after discussion.” I interpreted as not only benefitting from reflective observation but also the other three poles and the concepts taught in each pole.

Concrete Experience

SE responded very well when taught to concrete experience, one of the lower scoring poles. SE expressed, “[I] did a great job of getting me to understand musical concepts through methods of visualizing, singing and playing.” Also SE mentioned, “I have more musical intent within me.”

Reflective Observation

SE benefitted from being taught to the lower scoring pole, reflective observation throughout the lesson, as well as immediately after the lesson.

Abstract Conceptualization

Several concepts from this pole could be practiced after the lesson, including: the context of piece in relation to composer’s intent and articulation interpretation can be included in this category.

Active Experimentation

Although not referencing aspects found in active experimentation, I observed SE improve when being taught to this pole.

APPENDIX H



CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Study Title: Matching or Countering Student's Raw Score Order on the Kolb Learning Styles Inventory

Principal Investigator: Sarah Stoneback

Key Personnel:

Name	Role	Department	Phone Number	E-mail
Sarah Stoneback	Principal Investigator	University of Colorado Boulder College of Music	720-878-8764	Sarah.Stoneback@colorado.edu

Your participation in this research study is voluntary. Please think about the information below carefully. Feel free to ask questions before making your decision whether or not to participate. If you decide to participate, you will be asked to sign this form and will receive a copy of the form.

1. Purpose and Background

The purpose of this case study is to apply the Kolb Learning Style Inventory to teaching students to play the trumpet. From Fall 2010 – Spring 2012, I had the opportunity to be a lead graduate teacher in the University of Colorado College of Music. As part of this program, the Kolb Learning Style Inventory was used as a tool for understanding how we learn and in return, teach. I want to apply this knowledge with my experience as trumpet teaching assistant at the University to better understand how undergraduate music majors learn in the trumpet lesson. Study Tasks and Procedures:

- Eight students will take the Kolb Learning Style Inventory. Principle Investigator will then choose four students based on their scores to diversify the sample to participate in additional instruction with the researcher, which will not be counted in the student's grade for trumpet studio.
- Each additional instruction lesson will be held in the College of Music at the University of Colorado Boulder
- 6 lessons per student throughout the Fall 2012 semester
- 26 minutes each additional instruction lesson
- Using the student's raw scores in the Kolb Learning Style Inventory, each student will be taught in an additional instruction lesson alternately in their raw score order or in the opposite raw score order. Two additional meetings will be used as an introduction and closing lesson to the study.

- A questionnaire will be administered to the students after each additional instruction lesson. These questions address the level of excitement/frustration, motivation/demotivation, and satisfaction/dissatisfaction the student experiences during the lesson.

With your permission, each session will be videotaped so that I can observe my instructional skills, not for student performance. In order to protect the identity of student, I as the researcher will be the only one on camera.

If research is published or any written communications of this research occur, any identifying characteristics of participant will not be used. Pseudonyms, not birth names will be used.

2. Study Withdrawal

In the event you may cease a session or to withdrawal from the study, you will be permitted to do so at any time without penalty.

3. Risks and Discomforts

A foreseeable discomfort you may experience during the study may be feelings of frustration or demotivation or dissatisfaction in learning during the additional instructional lesson.

4. Benefits

As a participant, a foreseeable benefit of the additional instruction lessons may be having a better understanding on how you learn, as well as the benefit of the additional instruction, which may help you perform more effectively on your own and in Trumpet Studio class.

Confidentiality

These are some reasons that we may need to share the information you give us with others:

- If it is required by law.
- If we think you or someone else could be harmed.
- Research staff sometimes looks at forms like this and other study records. They do this to make sure the research is done safely and legally. Organizations that may look at study records include:
 - i. Office for Human Research Protections or other federal, state, or international regulatory agencies
 - ii. The University of Colorado Boulder Institutional Review Board

5. Participant Rights

Taking part in this study is your choice. You may choose either to take part or not take part in the study. If you decide to take part in this study, you may leave the study at any time. No matter what decision you make, there will be no penalty to you in any way. You will not lose any of your regular benefits. We will tell you if we learn any new information that could change your mind about being in this research study. For example, we will tell you about information that could affect your health or well-being.

6. Compensation

You will not be paid to participate in the study.

7. Contacts and Questions

For questions, concerns, or complaints about this study, call 720-878-8764

If you have questions about your rights as a research study participant, you can call the Institutional Review Board (IRB). The IRB is independent from the research team. You can contact the IRB if you have concerns or complaints that you do not want to talk to the study team about. The IRB phone number is (303) 735-3702.

8. Signing the Consent Form

I have read (or someone has read to me) this form. I am aware that I am being asked to be in a research study. I have had a chance to ask all the questions I have at this time. I have had my questions answered in a way that is clear. I voluntarily agree to be in this study.

I am not giving up any legal rights by signing this form. I will be given a copy of this form.

Name of Participant (printed) _____

Signature of Participant _____ Date _____

Matching or Countering Student's Raw Score Order on the Kolb Learning Styles Inventory

PRINCIPAL INVESTIGATOR:

Sarah Stoneback
Trumpet Teaching Assistant: College of Music
University of Colorado – Boulder
Boulder, Colorado
Sarah.Stoneback@colorado.edu

Central Research Questions:

Can the application of the Kolb Learning Styles Inventory to additional trumpet instruction inform the process? Will matching or countering the student's raw score order on the Kolb Learning Styles Inventory's four poles affect attitudes, motivation to practice, or satisfaction with the lesson?

Introduction and Background

1. This project was motivated by my desire to bring my experience as a lead graduate teacher into the College of Music at the University of Colorado, together with my role as a teaching assistant to undergraduate music students. I realized there is an important aspect missing in the world of performance: as performance majors, there tends to be less stress on how we teach and more on what works for the teacher. We are encouraged to “find our own trumpet teaching voice” by the résumé (or experience or intuition) we each bring to the process of teaching students, but rarely are we encouraged to consider the learning styles of our students.
2. This study intends to apply the four poles of Kolb Learning Styles Inventory to teaching students to play the trumpet. The four poles of Kolb LSI, as theorized by David Kolb (1984) are:
 - a. Concrete Experience (CE) = Experience of playing, feeling, aesthetics, beauty, meaning, figuring out.
 - b. Reflective Observation (RO) = Pondering about what the student knows, reflecting what it is like to play this piece on the trumpet.
 - c. Abstract Conceptualization (AC) = Explaining or illustrating the order or structure of the musical piece.
 - d. Active Experimentation (AE) = Asking questions about the music, instrument, or practice, just trying something out.
3. The Kolb Learning Styles Inventory measures student responses on four learning modes: Concrete Experience, Reflective Observation, Abstract Conceptualization, and Active Experimentation. The respondent ends up with four scores, e.g. CE= 12, RO=24, AE=36, AE=48. For the purposes of this study, I refer to these scores as the student's “raw scores on the Kolb Learning Styles Inventory.” I am interested in the process of how undergraduate music majors learn the trumpet. Might providing additional trumpet instruction that respects their raw score order provide a more satisfying and motivating

learning experience? Might providing additional instruction that counters their raw score order create dissatisfaction and demotivation?

4. The goal of this project is to determine if the application of a student's raw scores in the Kolb Learning Styles Inventory affect student's satisfaction, and motivation. I hope my project illuminates the role of student learning styles in trumpet lessons.

Primary Research Question

In individual trumpet instruction, does the teacher deliberately matching or countering an individual student's raw score order on the Kolb Learning Styles Inventory affect the student's attitudes, motivation to practice, or satisfaction with the lesson?

Description of Subject Population/Recruiting Methods

The subject population will be recruited via email and email response from junior trumpet performance majors enrolled in the College of Music at the University of Colorado Boulder in 2012. The email will include material from the consent form.

Participation is not mandatory nor is it connected to the student's grades at the University. This study involves additional instruction lessons that are exterior to their course, which is taught by a faculty member. I am not responsible for their grades.

This study will be described to the potential student participants for the foreseeable benefits including receiving a better understanding on how they learn, as well as the benefit of the additional instruction, which may help them perform more effectively on their own and in Trumpet Studio class.

Data Collection Methods

Data will be collected from undergraduate trumpet performance/education majors at the University of Colorado Boulder. Having subjects from the same class provides a better chance for working with people on similar tracks. An even sampling will be possible from this class. In addition, I have already established rapport with many of the students in this class. In fall of 2010, I taught a music fundamentals class, which included several of the students from which the sample will be drawn.

The Kolb Learning Styles Inventory will be administered to each student individually in the privacy of my office during the first week of school. These will be individually scheduled with me. A copy of the Kolb Learning Styles Inventory is provided for IRB review and IRB records.

The Kolb LSI is a written inventory in which students check off responses. Scoring procedures are built into the Kolb Learning Style Inventory itself. The paper document will be kept under lock and key in my office and will be destroyed after all analyzed in Spring 2014.

To apply the experimental condition, each student will be taught a total of six additional instruction lessons, each running 26 minutes in length (includes five minutes to fill out a survey at the end of each lesson). On the control days, I will be teaching to their raw score order on the Kolb Learning Styles Inventory. For example, if the student's scores are 48, 36, 24, 12, I will teach the lesson in that order. Data from experimental conditions (4) will be compared to that taken during control

conditions. All eight students will be required to take the Kolb Learning Styles Inventory test prior to participating in the study. From these eight, I will choose students with four different raw score orders to diversify the sample. Each individual student will then be taught according to his/her own raw score order as the independent variable and secondly I will reverse their raw score order (Taking the example above, the reverse order would be 12, 24, 36, 48.) using it as the dependant variable to determine their level of excitement/frustration, motivation/demotivation, and satisfaction/dissatisfaction on the different days. Following is how the Kolb Learning Styles Inventory raw scores will be incorporated during these six days.

DAY 1	DAYS 2-3, 4-5	DAY 6
<u>Baseline Data Gathering*</u> Researcher observations regarding student's starting ability on material, as well as their emotional involvement in the solo.	<u>Student's raw score order</u> <u>Opposite student's raw score order</u>	<u>Condition for day 6</u> will be chosen either for a make up lesson or at researcher discretion

* On this day, researcher will determine the aspects on trumpet and material, which are most challenging for that student. For example: tonguing, large intervallic leaps, high range issues, low range issues, etc. Also addressed in this initial session is their motivation to practice the chosen solo and their engagement with this particular piece.

Each student will be taught twice matching their raw score order and twice countering it, that is, in the opposite raw score order. Random sampling will be used to determine the dates on which experimental procedures will be used. Experimental days will yield several different possibilities for order. Following each lesson (six in all), the student will be given a questionnaire to assess the student's experience with learning the trumpet that day.

Following is an example of how the Kolb Learning Styles Inventory raw scores will be applied to teaching in a trumpet lesson:

Active Experimentation: Start playing and playing different ways (manipulating part of doing) on student's assigned solo material; researcher will listen and record general notes about student's level of involvement in playing.

Concrete Experimentation: Start off with "air fingering" through solo. After listening to teacher play, then play what they hear back (responding part of doing) Student will then be encouraged to converse about what they did which represent the conversing part of doing. Here, the student is not doing the entire task of playing, rather using intentional fingerings in a concrete experience.

Reflective Observation: Have the student listen to a recording of the student's assigned solo material, then have them write one paragraph reflecting on what they heard in the recording, i.e., sound, articulation and style.

Abstract Conceptualization: Have the student mark their music indicating certain areas of the solo, which present challenges for the individual. This activity asks the student to create a rational

explanation for the problems that may be present in their solo, as well as a flow diagram or outline of how that student conceptualizes the piece.

Lesson breakdown:

$$\begin{array}{rcl} & 5 \text{ minutes rapport/get things together} & \\ & 16 \text{ minutes teaching to either their raw score order/ opposite raw score order} & \\ + & 5 \text{ minute survey} & \\ \hline = & 26 \text{ minutes} & \end{array}$$

The choice of music literature to be learned by each student will be determined in conjunction with Professor Terry Sawchuk, main professor of trumpet at the University of Colorado College of Music. The piece should be challenging yet accessible (within reach) to the individual trumpet player. The lessons for each student will be focused on one solo/piece for the duration of the study. All juniors are required to present a junior recital on a particular piece, so the design of this project is supportive of student development.

The effects of the experimental condition will be assessed from the data collected. The outcomes to be measured include: the student's level of excitement/frustration with the lesson that day, and their motivation/demotivation immediately following the lesson to practice the piece and self reported satisfaction/dissatisfaction with learning the lesson. After each lesson, a questionnaire will be administered to gather students' reactions to the lessons. This will yield valuable insight regarding how teaching or not teaching to their raw score order affects their attitude, motivation and satisfaction in learning to play the trumpet. It is also important to note that improvement may naturally occur throughout the semester due to non-research related influences.

Consent Process

A written consent form will be given out to each student requesting permission for his or her participation in this case study. Participation dates, to be spread out over the semester, will be determined by working with the students to fit their schedules. At no time will a student be required to cancel a rehearsal or performance in order to participate. If scheduling conflicts do occur, study dates will be rescheduled.

Compensation

There is no compensation for participating in this case study, although many educational benefits could enhance the education of each participant.

Data Management

All quantitative data (e.g. responses to survey questions) will be stored in Microsoft Excel files. Student-sensitive data will be carefully stored to protect student confidentiality at all times, including during the study. The principal investigator will maintain the data and ensure it is kept private during and after the completion of the project. The data will be stored, in a locked office, for a period of five years before being destroyed.

A notebook/researcher log will also be kept throughout the study for the purpose of recording the progress or discoveries, moods or events. Information will be recorded in this journal to assess research progress over time. Researcher notes after each session will give a general sense of how well the session went and how engaged the trumpeter is with the piece being learned.

Each session will be videotaped so that I can observe my instructional process, not for student performance. In order to protect the identity of student, I as the researcher will be the only one on camera.

Data analysis will be accomplished with the help of Dr. Laura Border, head of the Graduate Teacher Program at the University of Colorado Boulder and Professor Terry Sawchuk, main trumpet professor at the University of Colorado Boulder.

Risks to Participants

It is not the intent of this research study to provoke frustration in the student. Theoretically, however, teaching to a student's opposite raw Kolb Learning Styles Inventory score may generate frustration and/or affect the student's motivation to practice the piece following the lesson. In the event students desire to cease a session or to withdraw from the study, they will be permitted to do so at any time without penalty.

Potential Benefits to Participants

As a participant, a foreseeable benefit of the additional instruction lessons may be having a better understanding on how student learns, as well as the benefit of the additional instruction, which may help the student perform more effectively on their own and in Trumpet Studio class.

Multi-Site Human Research

Not applicable: All aspects of this research will be performed on the University of Colorado Boulder campus.

Plans for the use of the data collected

1. Giving presentation/talks on findings (identities of student protected) for personal professional development.
2. Publishing the data in scholarly journals on trumpet (music) teaching and learning.
3. Sharing the results of the study with University of Colorado College of Music faculty, staff and students, with identities protected.

Bibliography

Kolb, David A. 1984. *Experiential Learning: Experience as the Source of Learning and Development*. Prentice-Hall, Inc., Englewood Cliffs, N.J.