MUSIC RE-INSTRUCTION: ASSESSMENT, PROTOCOL, PEDAGOGICAL GOALS - OUTCOMES, AND INSTRUCTIONAL GUIDELINES

Assessment

The assessment process begins with the first conversation with family members, doctors, and the student. Due to the effects of severe head injury, the student may not be able to give you accurate information about his/her current condition. This information does not need to be extensive and the rate and level of recovery may not be fully known.

The teacher/therapist proceeds in the first lesson with an assessment of the individual's physical, emotional, and cognitive strengths and weaknesses, as well as their motivation to learn the instrument and the level of support from their family and friends. The assessment process continues in each session, as the student demonstrates within the re-instruction format, where they are in terms of each of these domains as it relates to the instrument.

Physical: Observe the extent of finger/hand dexterity

Observe air flow capacity, embouchure, and hand/arm position as specific to the particular instrument

Observe the sitting position for comfort, balance, and strength

Emotional: Observe the level of emotional trauma as expressed through affect and verbal comments.

Observe whether the desire to re-learn the instrument is a personal goal or one desired/imposed by the family or friends.

Observe response to the steps of re-instruction to determine their level of frustration (which should be kept to a minimal).

Be aware that in some cases of head injury, the individual may experience difficulty in modulating their emotional response to circumstances. Such responses may or may not reflect a true reaction to the events of the moment.

Cognitive: Introduce a 'warm up', determined by the specific instrument, and observe the student's technical and musical understanding. As the warm-up progresses, move forward by gradually introducing new notes, scales and key signature, fingers and alternative fingerings, and expanding range to find out the point at which the student demonstrates areas of vulnerability or difficulty. Pinpoint areas of gaps of information relating to memory or physical facility throughout the re-instruction process.

Protocol, Pedagogical Goals, and Outcomes

Outline a strategy/method of instruction that starts at the very beginning of learning an instrument. This process should mirror as accurately as possible the client's/student's previous experience learning the instrument.

Must determine what the client/student is retaining as you navigate through the Re-Instruction process.

Re-assess musical, technical goals and expectations constantly when re-introduced musical material is played.

Determine what is the scope of information retained in the memory by asking a variety of technical and/or musical questions such as crescendo and diminuendo, accents, dynamic markings, tempi changes such as ritardando etc.

If the client/student is unable to answer, then proceed patiently through repeated instructional benchmarks again, asking questions, and thus further stimulate recognition or recall.

Adapt the instructional material based on existing conditions including general health, mental and emotional status.

Throughout this re-instruction process, it is the student not the instructor that regulates the rate of progress. Allow the client/student to determine the rate of progress with the assistance of the instructor's consistent process of re-assessment. The instructor's responsibility is to motivate, provide encouragement, and guide the student through an

appropriate sequence of music material that balances technical and musical learning. The instructor guides the student through the re-learning of material and determines moments that material can be omitted when and only when the material is ingrained and learned. Once points of loosed information or physical ability are observed, backtrack to a point of comfort. Present exercises at that level to make sure that the information is correct, solid, and secure before moving on. Then move forward in re-instruct protocol. **The instructor must reinforce, reinforce, reinforce!**

The focus must be on the client/student and his/her own generated rate of progress, NOT on the instructor. Proceed slowly, systematically and with confidence. Determine and adapt the roadmap for Re-Instruction. Since Re-Instruction is based on the theory of "re-learning the instrument and musical knowledge to pre-accident or trauma status", there will be periods and circumstances that material presented can be omitted or skipped if it is obvious to the instructor that the student has command of the concepts and technique. Finally, continue this process until material is presented and learned that represents the final level of musical and technical aptitude of the student.

Essential Pedagogical Skills of the Teacher/Therapist

The teacher/therapist guides the learning experience. It is essential that the teacher/therapist possess the following:

> Good musicianship ; Strong teaching ability; Ability to adapt to changing environment; Sensitivity to student's medical, educational, or artistic challenges

Relationship Between Teacher and Therapist

The Music Re-instruction protocol is more similar to an applied teaching model than a music therapy session model. However, the teacher/therapist must be aware that therapeutic work is essential to the recovery process. If an applied instructor is involved in the re-instruction process, it may also be necessary to rely on the music therapist to provide guidance on therapeutic issues. If the music therapist is providing the re-instruction, the therapist must rely on an applied instructor of that instrument to assist them in providing the steps of re-instruction appropriate to the specific instrument, or skills of the student, if the therapist is not trained in that specific instrument.

Guidelines for Re-instruction

Adapt the instructional material based on existing conditions including general health, mental and emotional status. Throughout this Re-Instruction process, it is the student not the instructor that regulates the rate of progress. Allow the client/student to determine the rate of progress with the assistance of the instructor's consistent process of re-assessment.

The instructor must continue to correct the student/client in matters of mechanics, such as hand position, tonguing, embouchure, in order to avoid establishing newly formed bad habits. During this Re-Instruction period, the student/client will focus on re-learning material and at times will neglect or forget the fundamentals germane to their instrument. The instructor should select materials, not only familiar to the student/client, but music that addresses a broad spectrum of musical and technical concepts, such as arpeggios, scales, etudes and solo literature.

The instructor cannot predetermine areas of deficiency with the student/client. One needs to be flexible, receptive and adjust the Re-Instruction method to all musical and technical concerns. The instructor's responsibility is to motivate, provide encouragement and guide the student through an appropriate sequence of music material that balances technical and musical learning. The instructor guides the student through the re-learning of material and determines moments that material can be omitted when and only when the material is ingrained and learned. The instructor must reinforce, reinforce, reinforce!

The focus must be on the client/student and his/her own generated rate of progress NOT on the instructor's. Proceed slowly, systematically and with confidence. Determine and adapt the roadmap for Re-Instruction. Since Re-Instruction is based on the theory of "re-learning the instrument and musical knowledge to pre-accident or trauma status", there will be periods and circumstances that material presented can be omitted or skipped if it is obvious to the instructor that the student has command of the concepts and technique. Finally, continue this process until material is presented and learned that represents the final level of musical and technical aptitude of the student.

Case Summary 1

Christine Blue (Westlake), a Bachelor of Science degree student in Music Education from Case Western Reserve University and an applied clarinet student of mine, was involved in a collision with a semi truck in which the truck "t-boned" her car, hitting her in the driver's door, in August of 1996. Christine nearly died and was in a coma for over a month.

Christine awakened from the coma and was transported from Metro Healthcare Hospital to a rehabilitation center (Heather Hill) in September of 1996. In January 1997, Christine and her mother were referred to The Cleveland Music School Settlement Music Therapy Department at Christine's own request with the hope of starting Music Therapy services. Christine could barely walk at that time and needed a walker to assist her. She had multiple injuries including four stable breaks in her pelvis.

At the time Christine and her mother met with our Director of Music Therapy, Louise Steele, I was the Executive Director of CMSS and also continued to serve as a clarinet faculty member. Christine was taking lessons from me during the time leading up to her accident. After she earned her undergraduate degree, she accepted a position teaching general music at an elementary school in East Cleveland. She then left that position for another in Astabula, Ohio (her dream job), where she was responsible for all levels of band and elementary general music beginning the following fall. She was leaving a summer marching band rehearsal when she had the accident.

Louise Steele, prepared an assessment with Christine and scheduled this assessment with staff member and music therapist, Ann Liberatore. At the assessment with Ann, it became very clear to me that I needed to work with her myself and develop a "re-instruction" model that drew on my experience as a clarinet teacher and my past experience of working with Christine. I truly believed that she could overcome the physical challenges and the effects of the traumatic brain injury that she was facing. When I subsequently had a meeting with Louise, I recognized that using music instruction as a rehabilitative process had not been reported in the literature but I was willing to proceed with this model and work with Christine exclusively. In essence, I decided to begin with the materials Christine was familiar with and start at the very beginning. This included utilizing a sequence of method books including the Rubank (Elementary, Intermediate), continuing with the Advanced Vol. I and II books, concluding our study eventually with the 32 Rose Etudes and the Mozart Clarinet Concerto, K622.

I made the conscious decision to start by asking Christine to play an open G, and asked her to descend by playing F, E, D, and C in succession. When I asked Christine to play E on the staff, she forgot and I placed her left hand on the clarinet guiding her thumb and first finger. Immediately, it was as if a light switch went on. She remembered the fingering of E, the name of the note, as well as a succession of other notes and fingerings.

Throughout this journey, I reviewed all musical and technical information including rhythm, notes and fingerings, dynamic markings, and terminology, as well as working with her to rebuild her lung capacity. I was amazed at her rapid progress and noticed a number of very important benchmarks. When I asked Christine to play a crescendo in a duet in the Rubank Advanced Volume I book, she did not remember what that meant but when I showed her the symbol of a crescendo, Christine remembered immediately and executed it properly.

Christine's learning process began very slowly and accelerated throughout the re-learning of the method books. Each week, I reviewed the next lesson and all relevant concepts and new learning (technique, rhythms, etc.) and Christine returned the following week with the assignment learned. The reviewing of new material with Christine frequently revealed her memory loss except for identification or execution of rhythms. Christine never forgot basic or complex rhythms when asked throughout this nine-month period. I relied on Christine's training, including her past experience of practicing scales or arpeggios, when I asked her to play etudes or exercises from these method books. Many times she recalled material that was previously learned and ingrained with past repetition of technical exercises or etudes when that same material was either re-introduced or practiced. Sometimes, the recalling of information happened when I reminded her of a fingering, alternate fingering, dynamics, tempo etc. These reminders resulted in her remembering one or multiple facts or concepts.

When Christine re-learned concepts, notes, and terminology, it was retained and never forgotten. Finally, when Christine reached the 32 Rose Etudes and the first movement of the Mozart Clarinet Concerto, she worked on the material in a similar manner as she did when she was a student at Case Western Reserve University. Essentially, she worked methodically and carefully, practicing complex technical studies and eventually she was able to once again focus on all aspects of clarinet playing including musical phrasing, pitch, sound quality, technique, rhythm, and tempo and articulation. At this time, the lessons more accurately resembled a typical college student working with his/her applied college faculty member focusing on a sophisticated level of musicianship and technique.

Christine returned to work in the Buckeye Local School System in Ashtabula, Ohio as an elementary through high school instrumental director and elementary music teacher by fall of 1997, only nine months after the accident. I believe that her playing was approximately 90% of what she previously accomplished as a college music student. Christine, in addition, had great support from her parents, friends and colleagues, as well as her church. Christine had a positive and determined attitude and her will to succeed was a driving force that significantly contributed to her recovery.

Case Summary 2

Dr. Fratianne is a surgeon and, at the time he was diagnosed with a brain tumor, was the long-time Director of the Burn Center at Metro-Burn Center at Metro Heath Care System in Cleveland, Ohio. Although he had not received formal training as a pianist, he played the piano "by ear "and did not read music. His playing was the primary means he used to relax from the stress of his medical responsibilities.

Although the surgical removal of his brain tumor revealed it was not malignant, the excising of the tumor resulted in the cutting of hundreds of neural connections within the brain. After surgery Dr. Fratianne experienced a long recovery period with the knowledge that he might not be able to return to his position.

He described his thinking process as being 'fuzzy'. Retrieval of information was often difficult; he could remember some things but not other materials. He found he couldn't remember details and had trouble doing ordinary activities of daily life. He was given speech, occupational and physical therapy but became quite depressed by the fact that he might not be able to return to surgery. Although he did not have pain, he experienced great emotional pain due to the sudden loss of his abilities required to do surgery and the possibility of not being able to return to surgery.

The entire close-knit burn team was concerned about Dr. Fratianne's rehabilitation psychologically as well as physically. The team was well aware of his relationship with the piano and felt that if they could encourage him to again play that perhaps his depression would decrease. A board certified music therapist at Metro, (contracted through the Music Settlement) was part of the burn team and began seeing him on a regular basis.

The music therapist took Dr. Fratianne into the common area of the burn unit and asked him to sit at the piano. He was surprised when she asked him to play. When he said that he could not remember how to begin, the music therapist asked him if he remembered the tune, *Twinkle Twinkle Little Star*. He didn't know where to start but responded to the music therapist's encouragement to put his finger on the first key, an 'e'. She sang small segments of the tune and assisted him in placing his finger on the next key until the first several measures of the song were completed. Little by little, session after session, he began to remember the tune until he could play it with one hand, adding a simple accompaniment with the left.

After some weeks, the music therapist instructed him to play a song he did not know. Since he had played only by ear prior to surgery, she sang for him the melody line, and asked him to duplicate it on the piano. Dr. Fratianne described the process of beginning tentatively and then, suddenly, there was a sensation that his brain cleared and he remembered how to play based on hearing the tune. He described it as a cascading of sensations in the brain and the feeling that " It all came back".

The rehabilitation therapists at the hospital began to see noticeable improvement in the areas of speech, cognition and physical ability. It was only 4 weeks after that point that he was cleared to return to the hospital as a surgeon. Dr. Fratianne states that he cannot claim that the Music Re-instruction was the turning point in his recovery process, however, he did experience a more rapid return to his profession than he and the specialists had initially anticipated.

Music Re-Instruction: Prior Presentations

1. Ohio University, School of Music, 2009, Athens, OH
2. American Music Therapy Association, 2010, Cleveland, OH
3. Society for the Arts in Healthcare, 2011, San Francisco, CA
4. International Society for Music and Medicine, 2011, Minneapolis, MN
5. University of Southern California, 2011, IGM - Keck Art Gallery, Los Angeles, CA
6. World Federation of Music Therapy, 2011, Seoul, Korea (This presentation given by Dale B. Taylor.)
7. The Colburn School, President's Council, 2011, Los Angeles, CA (This presentation given by Robert C. McAllister.)
8. American Music Therapy Association, Great Lakes Region, 2011, Lake Geneva, WI (This presentation given by Dale B. Taylor.)
9. American Music Therapy Association, 2011, Atlanta, GA.
10. American Music Therapy Association, Great Lakes Region, 2012, Grand Rapids, MI
11. *Fédération des Associations des Musiciens Educateurs du Québec, Music Learning in the 21st Century, 2012, Quebec City, Quebec, Canada*
12. San Diego State University, School of Music, 2012, San Diego, CA
13. Performing Arts Medicine Association, 2013, Snowmass, CO
14. University of Kansas, School of Music, 2013, Lawrence, KS
15. Hawaii International Conference on Arts & Humanities: 12th Annual Conference, 2014, Honolulu, HI
16. Eastern Washington University, Department of Music, 2014, Cheney, WA
17. Canadian Association for Music Therapy, 2014, University of Toronto, Toronto, CA
18. Western Region of the American Music Therapy Association, 2015, San Jose, CA
19. 22nd International Conference on Learning, 2015, Madrid, Spain
20. Carnegie Mellon University, School of Music, (presentation to graduate research class and collaboration with faculty of CMU and University of Pittsburgh), 2015, Pittsburgh, PA