International Baccalaureate®
Baccalauréat International
Bachillerato Internacional

MUSIC EDUCATION FOR THE 21ST CENTURY

LEARNING MADE FUN...
HAVING FUN WHILE LEARNING!

Presented by Tom Ansuini

mtcmusic@sympatico.ca

Music Education for the 21st Century – Active Teaching through ICT

A brief Introduction

Please allow me to introduce myself. My name is Tom Ansuini and I am a music educator, band director, arranger/composer and educational software developer living and working in Montreal, Canada. I have a Bachelor's degree in Music with a Major in Music Education from McGIll University and am now at the end of my Master's degree in Music Education at *Université du Québec à Montréal* (UQÀM). I have been teaching music, instrumental techniques and orchestra for the past 25 years and in that time, I have been blessed with school administrations, students and parents that have allowed me to transform my music programs into unique, innovative, motivating and validating experiences for all my classes. Throughout this time, I have also been actively involved in developing Educational Software to make learning of theoretical and ear-training concepts in music a fun and motivating experience for today's technologically empowered students. To date, I have published 4 music education software products *(in French)* as well as 2 music theory work books *(also in French)*.

My Philosophy

I have always believed that students learns best when they like what they do. If students enjoy a learning activity, they will find more motivation in doing it and will therefore give it 100% of their attention, and as a result, will be more adept at remembering and applying the concepts and notions that they have studied. Learning music requires students to develop their skills in 3 distinct disciplines: Theory, Ear-training and Interpretation (performance). Every student is motivated by the performance aspect, as the curiosity of exploring a new musical instrument and trying to play their favorite songs by ear is a driving motivator in itself. That is unfortunately not the case for Theory and Ear-training, which play an enormous role in the understanding of how music works and which must be developed equally if not more in order to allow performance skills to flourish.

I started developing music games for computers out of my own need to find ways to make theory and ear-training more appealing to my students. When I began my teaching career, I quickly realized that many students don't understand the important roles that theory and ear-training play in their musical development. Many find this aspect of music education boring and redundant. I didn't want that to be the case for my students, so I started developing computer games and activities aimed at teaching theory, ear-training and practical concepts in a fun and motivating way through interactive lesson modules, self-evaluating quiz modules and exciting video games for every taste. There's no reason

this stuff can't be fun! In my opinion, all that is needed is a motivating approach to teaching this material.

From a brief neuropedagogic point of view, emotions play an important role in the development of cognitive abilities; abilities directly linked to learning, remembering, problem solving and paying attention. A student stimulated in this way, through the use of educational video games, will be more actively aware of the musical concepts and of their function. The goal here is to provide the student with a motivating and rewarding experience. Make it fun! Students will be more apt at redoing an activity if the experience is fun and rewarding. This is the solution that I propose to help motivate students in the 21st Century in developing their music theory, ear-training and practical skills.

CHOUINCHI MUSICAL ADVENTURES

Space Staff (Chouinchi Notes)

Developing Skills

Essential Theory:

This program was designed to help students develop the following skills *(note that each page in the Theory Module has "Hot Words" that can be clicked on to provide additional information)*:

- Understanding The Staff
  - Lines and Spaces
  - Note positioning on the staff
  - Note positioning on ledger lines and ledger spaces
- Understanding The Notes
  - Note names (letters and sol-fa syllables)
  - The clefs (treble, bass and C-clef)
  - Reading music in the G clef (treble clef)
  - Reading music in the F clef (bass clef)
  - Reading notes on ledger lines and in ledger spaces
- Helpful tricks to remembering and reading the note names

Training Area:

This program contains 2 different interactive note reading quiz modules, each containing 12 different levels of difficulty. One quiz module lets the students choose a time limit in which to answer while the other requires them to answer on a steady pulse (which they set at the beginning of the quiz). Both quiz modules are designed to help students learn from their mistakes by giving the correct answers *(if the student makes a mistake)* and showing them how that answer was derived. This module allows students to select their own difficulty level and progress at their own pace based on their performance.

Video game – Space Staff:

This game challenges the students to put their reading skills to the test in a progressive music speed-reading game. The game begins slowly and allows students to save their progress, thus allowing them to leave the game, review their theory and return with fresh knowledge to advance to the higher levels. The students can choose to play in the G-clef or the F-clef or both, depending on their skill level.

Chouinchi Rhythm – Secrets of the Rytmii

Developing skills

Essential Theory:

This program was designed to help students develop the following skills *(note that each page in the Theory Modules has "Hot Words" that can be clicked on to provide additional information)*:

- The concept of Tempo and Pulse
- Counting in tempo
- Notes and their values
- Rests and their values
- Note grouping
- Time signatures

Training Area:

This program contains a rhythm playing quiz module with 3 levels of difficulty. Students are presented with a 1-bar rhythm which they must play 4 times in tempo (non-stop) on the computer keyboard. When students make a mistake, the correct answer is given to them and they are given the chance to hear and see what the correct playing of the rhythm would be. Again, this module is designed to allow students to learn from their mistakes and to progress at their own pace through each difficulty level.

Video game – Secrets of the Rytmii:

This game challenges the students by putting their rhythmic sight-playing skills to the test in a progressive tempo-based strategy game. The game begins with very simple rhythms and allows students to save their game, thus allowing them to review and practice (and improve) in the Training Area before attempting to reach the higher levels. The students apply their understanding of the rhythmic elements as well as their sense of tempo to advance through this game.

Chouinchi Intervals

Developing skills

Essential Theory:

This program was designed to help students develop the following skills *(note that each page of the Theory Module has "Hot Words" that can be clicked on to provide additional information)*:

- Understanding Distance in an Interval
- Understanding Quality in an Interval
- What are Scales - Types and models?
- How to hear and identify Intervals
- What are Scale Degrees and Technical Names?

Training Area:

This module contains 3 different interactive interval identification quiz modules. The first module is designed to study and practice ascending melodic intervals. The second is for descending melodic intervals and the third is for harmonic intervals. Each modules allows the students to select what intervals they want to include in their quiz, ranging from a minor 2nd up to an octave (and everything in between). This option allows students to select specific intervals that they have trouble hearing and to drill themselves on those. Each question is always generated randomly from a different starting pitch and, in the event of a mistake on the part of the student, the module will indicate the correct answer along with options to listen and isolate each note individually. This is especially useful when practicing harmonic intervals, whereby it allows students to hear each note separately and then together (thus allowing them to form a mental image of the pitches and their relation to one another).

Video game – Chouinchi:

This game challenges the students by putting their interval ear-training skills to the test in a pinball-style bouncing Chouinchi game. The game begins with just 3 simple intervals to identify (each question on a different starting pitch) and allows students to save their game after successfully completing each level. Students can practice and further develop their interval aural perception by returning to the quiz module between levels and then continuing from their saved game to progress to the higher, more complex levels (more intervals included).

Noteopolis

Developing skills

Essential Theory:

This program was designed to help students develop the following skills:

- Understanding the Piano Keyboard
- Understanding Sharps and their effect on notes
- Understanding Flats and their effect on notes
- Understanding Enharmonic Equivalents on the keyboard

Training Area:

This program contains 2 practice modules. Both require the students to give their answers in tempo on a given pulse. The first module is designed to let students practice identifying notes from a Staff to a Piano Keyboard. This module offers 4 difficulty levels ranging from absolute beginner *(white keys only in 1 octave range)* to advanced *(all keys including enharmonic equivalents in 2 octave range)*. If students make a mistake, the module will stop, show them the correct answer and ask them to reenter it correctly before continuing. The second module is designed to let students practice identifying the names of the notes on the Piano Keyboard (no staff). Again, if students make a mistake, the module will stop, indicate the correct answer and let the student study it before continuing. Along with their music reading and piano keyboard identification skills, student also reinforce their sense of tempo and their ability to keep time with their foot and in their head.

Video game – Noteopolis

This game uses the same structures as the ones seen in the quiz modules, but with various bonuses and rewards awarded for answering 5 in a row and catching little bouncing creatures between questions. As an additional motivational element, students collect energy points at the end of each game which will accumulate from one game to the next. Once enough energy is accumulated, they can use it to "purchase" little animated pets (Mon-shkins). Collecting these pets allows students to unlock a special mini-game associated to each pet. This guarantees that the students will continue replaying *(and developing their skills)* to accumulate enough energy to unlock all the pets.

Musical Adventure – The Tablet of Rhythmic Supremacy

Developing skills

Essential Theory:

This program was designed to help students develop the following skills:

- Rhythm Theory
    - Notes and their values
    - Rests and their values
    - Time signatures
    - 1-beat Rhythmic Elements
    - Tempo and Counting
- Rhythm Ear-Training
    - Identifying 1-beat Rhythmic Elements
    - Identifying 2-bar rhythms

3D 1st person video game

This Educational Musical Adventure puts the students in a mysterious 3D world which they must explore in order to find clues and information which will allow them to solve rhythmic puzzles. Armed with their Adventurer's Handbook, students copy down the clues (rhythm theory) and later refer back to them in order to solve the puzzles (rhythm ear-training questions and theory questions). This grand adventure is divided into 3 chapters; each one progressively more difficult, but each one also providing all the necessary information that needs to be studied in order to solve it. The adventure allows students to explore and discover the musical concepts and then use their knowledge to advance and claim the rewards of their adventure.