

## PROPOSAL OF ACTIVITIES TO UNLOCK CREATIVITY USING REAPER SOFTWARE

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**SUMMARY.** Using technology in a creative-based approach to music learning is beneficial when we refer to the development of creativity as the finality of artistic musical education. In its permanent movement, we notice that the educational process progressively removes everything that becomes dysfunctional outdated. Therefore, both through the act of teaching learning and through the act of evaluation, as the blockages of any nature that stand in the way of creativity are discovered, they can be diminished. This article proposes musical activities that use Reaper software, which provides a good environment for grooming students with aesthetic sensibilities that should always accompany technical knowledge. Moreover, this article serves as a starting point for teachers hoping to develop creativity through music software.

**Keywords:** Reaper, software, creativity, music education.

### Introduction

Starting from my opinion that using applications and music software in the teaching and evaluating process helps the teacher to observe both the process of training and development of his students' musical skills, as well as their artistic products, this article proposes musical activities that use Reaper software to unlock creativity.

According to the Oxford Learner's Dictionary of Academic English, creativity is the use of skill and imagination to produce something new or to produce art. Regarding the concept of creativity and its connection with music education, research has begun to focus increasingly on both the educational process and the results obtained (Barrett, 1998; Folkestad, 1998;

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Morgan, 1999; Macdonald & Miell, 2000). However, analyzing and observing the factors which affect creative music making remains one of the least studied aspects of music education. In a 2009 study, Oscar Odena and Graham Welch offered a generative model of teachers' thinking on musical creativity, to develop over time, another perspective on the subject, towards music education that encourages and develops students' creativity (Odena, Welch, 2009).

A 2013 case study described the development of creativity in high school students through their participation in a music technology course. The central question on which this research was based was: *“How do music teachers and students describe the students’ development of creativity through their participation in a music technology course?”* The result of the research was a positive one, and the author concludes that *“future research into how music technology may enhance the collaboration of creative projects will be important”* (Nielsen, 2013). Also related to the connection between creativity and musical technology, another research from 2013 argues that it is necessary to find new ways to engage students in music education. As the authors claim, *“teaching with music technology provides an affordable point of entry for nontrained music students to express their musical sensibilities. Computer based tools have become the standard for the music industry. We posit that music technology classes serve as an excellent environment for creative development, offering self-awareness of one’s creative process, experiential flow learning, and creative thinking skills”* (Rosen, Schmidt, Kim, 2013).

In his book - *Using Technology to Unlock Musical Creativity*, composer and educator Scott Watson proposes a set of principals in music education assisted by computer technology. From the classroom research that the teacher undertook, these formulated principles are those that have ensured success in developing creativity through ICT-based music education. Of these, we would like to mention those for which the applications proposed below provide a valid answer. Thus, we consider the principle that aims to allow students to share themselves, the one that claims to use parameters and limitations that remove distractions during activities, and finally, the principle that proposes to facilitate improvisation (Watson, 2011, xix).

## Discussion

Reaper is a digital audio workstation (DAW) software and MIDI sequencer created by Cockos. As any DAW software, Reaper is used for recording, editing, and producing audio files. *“The term digital audio workstation*

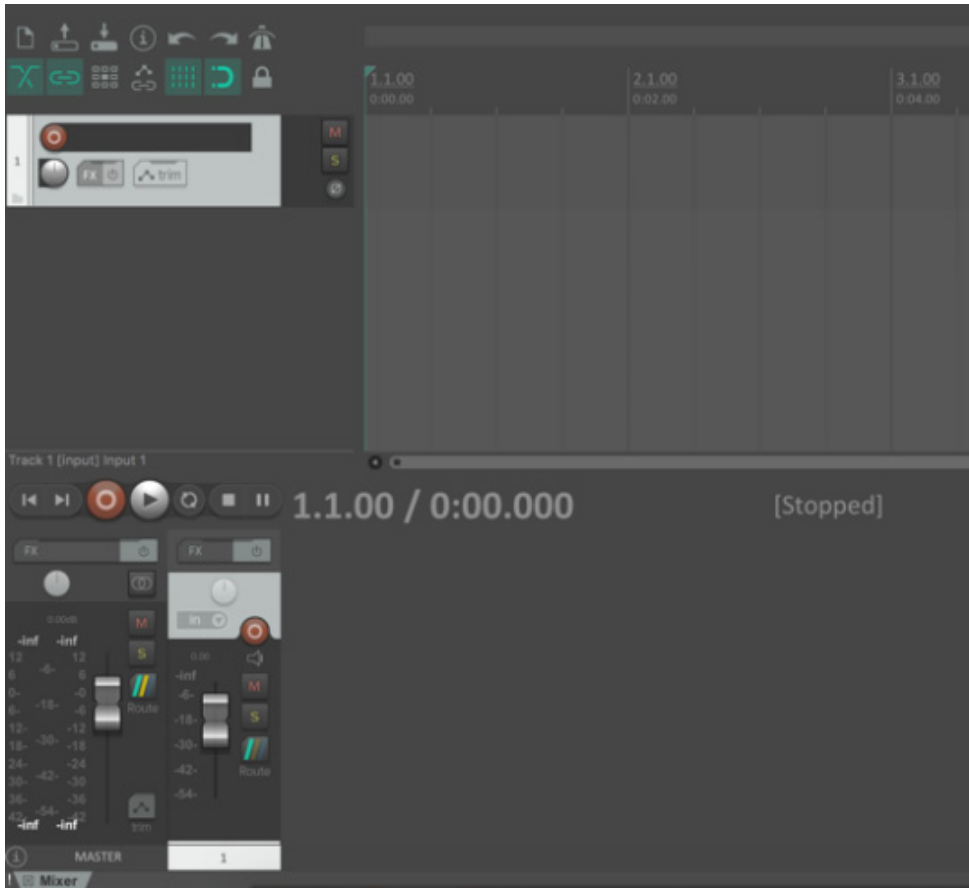
*refers to a single software application that allows for many aspects of music production, including audio and MIDI recording, editing, and mixing” (Watson, 2011, xxv).*

In the following lines, I will propose some musical activities that use Reaper software and aim to develop creativity for students of all ages and all levels of musical training. In the traditional sense, music education focuses on performing music and factual knowledge about music, and less on self-expression through music, self-knowledge, and musical creation. The proposed activities bring a paradigm shift, without dethroning the other objectives of music education, so they can be incorporated into classroom music activities, but not in an exclusive way.

### **1. Musical collage - *This is me***

This activity involves individual work and refers to the creation of a musical collage of maximum 2 minutes long, comprising a minimum of 3 distinct musical pieces (in whole or fragments). The student is invited to present himself / herself through a collage of his / her favorite pieces of music. This musical activity respects the principles we discussed earlier, inviting students to share themselves in front of the group, after the collage is ready. Moreover, the success of the activity depends largely on the limitations and rules imposed - the total collage time and the number of pieces that students can use. We do not consider it necessary to limit the musical genres chosen for the collage, so that students have real freedom of expression.

This activity is only possible after completing the basics of using Reaper software. Therefore, the preconditions are students need to know how to import audio media, to work with tracks and windows, and split, cut, overlap, and glue audio items. After this technical knowledge is assimilated, the proposed activity verifies their acquisition.



**Main window - Reaper**

The objectives of this activity are:

- Self-knowledge.
- Ability to express oneself through musical choices.
- Ability to be creative in overlapping and / or gluing songs together.
- Ability to be creative in placing the songs/fragments in a certain order.
- Ability to comply with imposed limitations (related to time and musical material).

This activity (or variations of it, like sharing one's favorite sounds), does not require specialized musical skills. Eventually, as students gain confidence in this type of creative process, they will want to share their melodic or rhythmic phrases, in-work or complete compositions at any level. As you can see, today's technology tools make this type of activity easy to do.

## 2. Placing the notes in a certain order

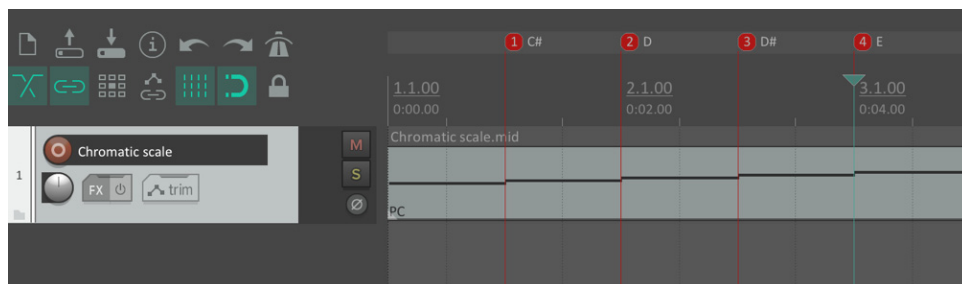
The second activity I propose involves the same principles, which we talked about in the previous lines. The individual activity involves the teacher offering students a recorded chromatic scale on an octave, as an audio file. Students insert this audio item in the Reaper main window and, with the help of tools, split the scale into distinct notes, and then place them in the order they want. For the placement of the notes, the students receive various questions, to which they must answer musically, with the help of the melodic fragments created from pieces of the chromatic scale.

Types of questions the teacher can ask:

- What does today sound like to you?
- What does friendship sound like to you?
- What does be angry sound like to you?
- What do seasons sound like to you?

As required parameters, the teacher can limit the melodic fragments that students generate to a fixed number of sounds. Because the chromatic scale offered as the audio material to be processed has only equal note values, only the melodic parameter will be considered, and not the rhythmic one. Therefore, this activity involves exclusively the expression through the interval relations between sounds.

**E.g. 2**



**Chromatic scale to use**

The objectives of this activity are:

- Ability to express through melodic relationships.
- Ability to comply with imposed limitations.

This type of creative project, and variations of it, should and could be used as a vehicle to demonstrate the understanding of musical concepts – melody (with this activity), harmony (with an activity using harmonic relationships to express feelings and ideas), and rhythm (with an activity using rhythmic relationships to express feelings and ideas).

### 3. Rhythmic improvisation over a given audio file

For this activity, the student will receive a music fragment as an audio file and will be encouraged to record a rhythmic accompaniment based on body percussion for it. This type of activity facilitates rhythmic improvisation.

The prerequisites for this activity are knowing how to set up inputs, arm tracks and audio records from the laptop / headphone microphones. After the student records the required rhythmic accompaniment, it is necessary for him to render the whole project as an audio file, so that his rhythmic improvisation can be heard publicly over the original musical fragment. This type of activity is subject to improvisation pedagogy, that is often equated to learning a new language. *„The end goal is to be able to participate in musical conversation in real time with other musicians. Learning a new language consists of four interconnected practices: listening, reading, writing, and speaking. In this analogy, improvisation is similar to speaking the language being learned.”* (Carmona, 2016, 10). Recording of improvised parts brings the possibility of self-assessment through repeated listening, so the use of Reaper software is welcome.

**E.g. 3**



**Track armed for recording, using a laptop microphone**

Depending on the level of musical training of the participants, a variation on this activity involves the vocal or instrumental recording of an improvisation over a given piece of music - pre-recorded by the teacher. If participants have a beginner level in terms of melodic improvisation, they can be encouraged to use a limited number of sounds, with a clear mention of them. Therefore, the recorded melodic improvisation can be limited to a certain musical scale imposed by the teacher. Moreover, you can combine the activities mentioned above, by going through the steps from activity number 2 - cutting some notes from the chromatic scale and tying them in an order desired by the student, as a melodic improvisation over an audio file provided by the teacher. Thus, we notice that the principle of introducing various limitations works differently, depending on the level of preparation of students, but the common goal remains to encourage the unlock of creativity through Reaper software.

## **Conclusions**

The involvement of students in creative activities using music technology must go beyond technological instruction emptied of the goal of music education. Not everyone who knows how to handle a DAW software is called a musician, but, as can be seen from the applications listed above, these technologies provide a good environment for grooming students with aesthetic sensibilities that should always accompany technical knowledge.

The blockages that students encounter in the development of creativity can be easily overcome when activities with clear rules are proposed, adapted to the level of musical training, and when the technology is used for beneficial purposes. What is admirable and noteworthy about DAW software, as is Reaper, is that software designers have made the technical side of these technologies invisible so that users can see the creative side more easily without distractions. Therefore, I think it is encouraging to use music technology in music activities, especially when we aim at unlocking creativity.

The creative projects presented above are extremely flexible and adaptable depending on the students' and teachers' level and experience, and available technology. Adding creativity to our pedagogical activity, facilitated by appealing technology tools, will allow both teachers and students to see a different facet of the musical self, and keep recordings regarding one's evolution.

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