**Headphones Study**

**Advising & Learning Assistance Center**

**Rensselaer Polytechnic Institute**

Effective study environments

There are as many different study environments as there are students. Some students cannot study when it is *really* quiet, because then any sound at all attracts their attention. Some students need the quiet because they cannot "tune out" noises, so what is conducive to one is not necessarily conducive to another. Some students have to create a "box" to try and screen out anything their eyes might see, because they are very distracted by movement. Others need a busy environment so that there are no isolated movements to attract their attention. Some people can have TV in the background, not directly in front of them, and use the noise for masking other noises, while others find the TV an attention magnet.

So what can be said about certain study environments?

**Background music**

Studying with headphones on tends to decrease retention/memory, whereas music in the background can be an aid to study. The difference between the two deals with how close the input of sound is.

Headphones have direct access to the brain by covering the ears, and this direct access can interfere with learning, especially if the material is new and the new material is difficult! Being "lazy," the brain prefers the close input of the music over the more distant, more difficult input from the eyes that it must translate and "work on" to understand.

Unlike music through headphones, background music has all environmental noises included in it, and to hear this music to the exclusion of other input requires intense concentration. For example, if you have ever seen somebody trying to listen to an instructional recording in the middle of a busy work environment, you may have noticed that they closed their eyes to decrease visual input to help them focus on the sound. People do not use this type of concentration for environmental sounds, and can focus on the closer print material to a greater degree. Some people use familiar music to mask outside noises. With the music being very familiar, the student in some ways does not "hear" it, it is an expected noise with an expected sequence. So a student studying in a room with a stereo going can be masking (hiding) sounds from the hall or somebody's TV, while working on material for classes. Some studies even suggest that certain types of music -- such as Bach, Beethoven, or flowing instrumentals -- may even increase intelligence and retention of material. However, hard driving rock, rap music, and heavy metal cannot make the same claim!

(Taken from Advising & Learning Assistance Center at Rensselaer Polytechnic Institute)