## Foreword

Why Education Needs a Soundtrack



**F** or over a century, researchers have explored the power of music, with the last decade in particular yielding considerable scientific evidence about its extraordinary neurological effects. For example, in

May 2010, researchers from Boston University School of Medicine found that patients with Alzheimer's disease—with virtually nonexistent short-term memories—achieve close to normal memory of new verbal information when it is provided in the context of music.

As the evidence has piled up, many sectors, from health, to manufacturing, to advertising, have deliberately harnessed music, not just to heal, but to control, influence, and modify human behavior. Indeed, we are now at the point where the music that plays in every store, restaurant, and sporting venue is scientifically selected to create a specific effect on patrons.

Yet, education has not followed suit. Despite a widespread knowledge and acceptance of these concepts, teacher education still fails to include the use of music as a deliberate teaching strategy or classroom management tool. As a result, educators lack the understanding, skills, and resources to use one of the most powerful teaching tools at their disposal—a tool that offers at least five scientifically proven benefits in the classroom.

- **1. Music acts directly on the body,** specifically on metabolism and heartbeat. Listening to certain types of music can trigger the release of endorphins, producing a tranquil state that leads to faster learning.
- 2. Music relaxes the mind and lowers stress levels that inhibit learning, and when used effectively, music increases alpha levels in the brain, boosting memory and recall and allowing the brain to access reserve capacities.
- **3. Music stimulates and awakens,** reviving bored or sleepy learners and increasing blood and oxygen flow to the brain.
- **4. Music is a state-changer** and can be used effectively to get students into an effective learning state or support transitional activities.
- **5. Music aids memory,** both acting as a powerful anchor that moors learning in memory and also inspiring emotion to create a clear passage to long-term memory.

Please note this book is not about the "Mozart effect," the controversial theory that listening to Mozart increases intelligence in children. This theory is not based on solid research, but a single study, whose authors claim their findings were misrepresented; whereas, the five effects noted above have been demonstrated by multiple studies—opening the door to new teaching and classroom management strategies.

## So Why Don't We Use More Music in Our Classrooms?

As with so many decisions in education, the real reason our sector has lagged so far behind others in using music comes down to resources. Until very recently, the equipment required to use music effectively in the classroom was prohibitively expensive. But today, music players and speakers are relatively cheap and extremely easy to use. The major hurdle to education harnessing the power of music has been removed.

However, two smaller but significant hurdles remain. First, using music effectively in the classroom is a practical skill. Different types of music used in different ways produce different effects. Teachers must understand what these different types of music are, why they work, what effects they create, and how to use them. Second, not all music is appropriate for use in the classroom—and not just because it includes inappropriate lyrics. Only certain types of music, with certain beats, or instrumental complexity, work in certain situations. Education playlists must be properly researched—and this can be extremely time-consuming.

This book removes these final two barriers. It clearly explains the different research-supported uses of music in the classroom—*what* the possible uses are, *why* they work, and *how* to apply this knowledge in the classroom. And it also provides appropriate playlists for each application, along with guides to help teachers create their own lists.

We hope it will be the catalyst for education to act on the evidence that other sectors are currently using—to great effect. Research suggests that, if every classroom had an appropriate sound track, we could boost academic results, improve student behavior, and reduce teacher burnout.

This final benefit is the hidden but vitally important reason that we are passionate about getting our schools wired for sound. Music takes much of the stress out of teaching. In many ways, it offers you a "remote" for your class. Touch a button and your students shift from bored to engaged. Touch another and they calm down. Change the volume and get every single student's attention—without ever having to raise your voice. These are just a few of the seemingly magical results possible through the effective use of music. We hope this book helps you to make them happen in your classroom.

W. W. Wood and Rich Allen