

# LITERACY & NUMERACY

The Literacy and Numeracy bundle is filled with research, tools, and information. These tools can either be shared with parents to enhance their knowledge or used by teachers to increase their own confidence and effectiveness in communicating with parents.

## DEVELOP YOURSELF

These tools have been designed to facilitate your learning and understanding of the research on music learning and brain development.

Discover practical ways to apply the research directly to your teaching.

## SHARE DIRECTLY WITH PARENTS

These tools have been exclusively tailored to be shared directly with parents.

Use these resources as a tool to connect with parents, gain their support for the work that you do and help them understand the powerful benefits of music learning.



# WHAT'S INCLUDED?

## GET YOUR MESSAGE OUT

Communication Bundle

**\$30AUD**

**8 x Social media ready Quotable Research Cards**

**1 x Shareable Music Learning Infographic**

**1 x Shareable Video**

- Music learning improves Math, Science and English

**4 x News Articles that you can share at the click of a button**

**1 x Easy to share research Ebook**

- How are music and language connected in the young brain?

## SUPERCHARGE YOUR ADVOCACY

Development Bundle

**\$50AUD**

**Includes everything in the "Get your message out" set**

**PLUS**

**2 x Professional Readings with Teaching Reflections**

- Reading and music learning are complementary activities
- Which music & reading model is best in schools?

**2 x Easy to share research summaries**

- What connects music learning and language, reading and literacy skills?
- What connects music learning and numeracy skills and understandings?

**Which bundle will you choose?**

[Click here to add to cart](#)

# GET YOUR MESSAGE OUT

## COMMUNICATION BUNDLE

### 8 X SOCIAL MEDIA READY QUOTABLE RESEARCH CARDS

These bite-sized gems of information are tailored to enhance your emails, newsletters, and parent presentations, making it effortless for parents to grasp the advantages of music education.

Easy to add to newsletters, emails and social media

[See full collection](#)

“Parallels between music and language suggest that musical training may lead to enhanced verbal abilities.”



A child's ability to synchronize to a beat is mirrored in their preliteracy skills and robustness of their auditory midbrain response to speech syllables



Bonacki, S., Huang, S., White-Schwoch, T., Kizman, J., Nicol, T., & Kraus, N. (2020). Rhythm, reading, and sound processing in the brain in preschool children. *npj Science of Learning*.



“Music training initiated as late as adolescence can enhance neural processing of sound and confer benefits for language skills.”



Tierney, A. T., Kizman, J., & Kraus, N. (2015). Music training alters the course of adolescent auditory development. *Proceedings of the National Academy of Sciences*.

“Musical training benefits the neural encoding of speech”



Patel, A. D. (2011). Why would musical training benefit the neural encoding of speech? The OPERA hypothesis. *Frontiers in psychology*.

Ready to print and hand out to your community

[Click for more](#)

### HOW ARE MUSIC AND LANGUAGE CONNECTED IN THE YOUNG BRAIN?

Present complex research in a reader-friendly format, helping you grasp the profound connection between music education and brain development.

### HOW ARE MUSIC AND LANGUAGE CONNECTED IN THE YOUNG BRAIN?



### OVERLAPPING NEURAL PATHWAY

The music-processing network and the language-processing network share an **overlapping neural pathway**. Think of it like a highway where many cars (pieces of information) are travelling along. The more traffic, the more likely the highway will get widened and improved.



### BIRTH TO AGE OF 6

At birth, the music processing network is active. We know this because one-day-old babies have been found to use their music-processing network to process their mother's voice [1].

From birth to around the age of 6, children use their music-processing network to identify, understand and reproduce language sounds. This is because our auditory (sound) processing network processes all sound for its musical qualities.



### READING AND BEAT KEEPING

Interestingly, other music learning activities also contribute to language development. Children who can clap a steady beat between the age of 3-4 have been found to be cognitively ready to read at the age of 5. Conversely, those children who can't not clap a steady beat are likely to struggle with their reading [2].



# GET YOUR MESSAGE OUT

## COMMUNICATION BUNDLE

### 1 X SHAREABLE VIDEO

Music learning improves Math, Science and English!



Quickly and easily  
share this video on  
social media

[See full collection](#)

Amplify your program  
booklet or add into  
your concert invitation

[Boost your students!](#)

### MUSIC LEARNING HELPS INFOGRAPHIC

This research backed infographic has been designed to help your community understand the how music learning can help literacy.



Great for A4  
printing

[Click here to add this bundle to your cart](#)



# SUPERCARGE YOUR ADVOCACY

## DEVELOPMENT BUNDLE

### 2 X PROFESSIONAL READINGS WITH TEACHING REFLECTIONS

Authored by Dr. Anita Collins, these professional readings provide a comprehensive analysis of research findings and offer practical strategies for incorporating them into your teaching practices.

Discover how you can apply the research to your teaching

[Click for more](#)

### Which music & reading model is best in schools?

Music and language learning research in the neuromusical research field has an extensive history. Very soon after the emergence of the field, the connection between music and language learning were identified and explored. This connection was very exciting to researchers because it had the potential to reveal the neural mechanisms behind how humans developed the ability to speak, read and write a language. A species has developed.

### Which music & reading model is best in schools?

Professional Reflection • Part 1

#### Personal Brain Buzz

If you had to explain the connections between music and language inside the brain in 100 words, what would you say?

# SUPERCARGE YOUR ADVOCACY DEVELOPMENT BUNDLE

## 2 X EASY TO SHARE RESEARCH SUMMARIES

Present complex research in a reader-friendly format, helping you grasp the profound connection between music education and brain development.

Ready to use research - easy to understand format

[Click for more](#)



Click here to add this bundle to your cart