# Problem / Solution / Explanation

## It can be said that without a doubt, Morse code has left its imprint on the history of civilization. Traces of Morse code and telegraphic technology, in general, can still be found in nearly any form of modern communications. However, without a full understanding of the way that Morse code functions and the technology used only decades ago, current students of history are not able to fully grasp communication methods of the past. Furthermore, Morse code is not a standalone language. With just minimal practice and instruction, anyone can easily learn and comprehend Morse code.

With history in mind and an eye towards the future, our solution was made to ensure that future generations will be able to comprehend Morse code, and all that it meant to those who lived in its era. Our solution aspires to use a simple, clean interface to not only translate from English to Morse code but have the translated phrase be able to play aloud for the user to observe how the messages might have been understood in the nineteenth century. In addition, we wanted to provide not only a translation but a way for the user to see what each individual letter translates to.

It has been proven that a Multisensory Teaching Approach (MTA), produces a higher retention rate of knowledge in students that nearly any other teaching approach. [[1]](#footnote-1) This multisensory experience of both seeing the translation appear on the screen of the device and hearing the ‘dits’ and ‘dahs’ from the device speakers creates a more memorable user experience than either of these two things taken by themselves. The goal is that this user experience will be able to be used by students around the world to quickly learn and understand the implications of Morse code.

Furthermore, it has been shown that many students learn best through trial and error and self-driven experimentation. Our solution will operate in accordance, allowing the user to explore and try out any phrase or sentence that they like instead of instructing based on a rigid lesson plan

With any facet of history, it is imperative that we retain an understanding of technologies and innovations that shaped our present world so that we can not only understand the past but use it to build a better future. The same sentiment holds true for Morse code. Teaching the skill of Morse Code does not only give knowledge to the student, it also teaches the student a completely different way of thinking, one that allows for analysis and quick interpretation of sensory inputs.

The solution we developed has the potential to be effortlessly implemented in the lesson plan of any elementary, secondary or post-secondary history curriculum. With the rise of Bring Your Own Device (BYOD) policies on school, students would be able to access the program online from any school in the world. Through making the software as accessible as possible, the maximum number of students possible would be able to be reached to provide a healthy appreciation of Morse code around the world.

1. https://mtspublications.com/about-mts/ [↑](#footnote-ref-1)