

Edward L. Thorndike (1874-1949)

Often referred to as the father of educational psychology, and one of the prominent figures responsible for the final collapse of mental discipline, Edward L. Thorndike used experiments to demonstrate the limitations in transfer of knowledge across disciplines, a key component of the mental discipline movement (Kliebard, 2004). Thorndike argued knowledge was specific and non-transferable, and demonstrated this in a series of experiments published under the name “The Influence of Improvement in One Mental Function Upon the Efficiency of Other Functions” (Thorndike & Woodworth, 1901). The purpose of the experiments was to test the efficiency in training one mental function to improve another similar mental function, in other words the transferability of knowledge. For example, participants were tested on their accuracy in estimating general magnitudes (length, area, and weight), and then received specific training in one area (e.g. length) until they were proficient. Participants then repeated the preliminary general test, and the results showed improvement in estimating length did not lead to improvement in estimating other areas, which Thorndike interpreted as disproving the claims made by the mental discipline.

Moving outside of the laboratory and into the school system, Thorndike then conducted more direct experiments that attacked the value of particular school subjects (English, History, Geometry, and Latin) on overall intelligence. Using a standard intelligence test and students in different subject groupings, he proclaimed that any gains made over the course of the year were due to students’ intelligence before coming into the subject not the subject itself (Thorndike, 1924). In other words, the traditional subjects did not lead to improvement in intelligence scores. Thorndike’s conclusions reaffirmed the progressive movements’ beliefs and added fuel to the already burning ruins of the traditional curriculum.

References

- Kliebard, H. M. (2004). *The struggle for the American curriculum, 1893-1958*. Psychology Press.
- Thorndike, E. L. (1924). Mental Discipline in High School Studies. *Journal of Educational Psychology*, 15(1), 1.
- Thorndike, E. L., & Woodworth, R.S. (1901). The influence of improvement in one mental function upon the efficiency of other functions. *Psychological review*, 8(3), 247-261, 384-395, 553-564.