

تصميم مقياس لمساعدة ذوي الإعاقات البصرية للتعرف على فئات العملات الورقية المصرية

Designing a gauge to help People with visual disabilities to identify the denominations of Egyptian banknotes

أ.م.د/ مصطفى محمود محمد خليل

استاذ مساعد بقسم الطباعة والنشر والتغليف - كلية الفنون التطبيقية - جامعة حلوان

Assist. Prof. Dr. Mostafa Mahmoud Mohamed Khalil

Associate Professor at printing, publishing & packaging Dep. Faculty of applied arts
Helwan University

mm_3m@yahoo.com

Abstract:

The world seeks with all organizations, authorities, governments and researchers to promote services for people with visual disabilities (the blind and the visually impaired). Since the French Scientist Braille began lighting the world to the blind by inventing the language of Braille and since then the development and research continue to ensure a better life for them, President Abdel Fattah Al-Sisi declared that 2018 is the year of people with disabilities and issued Law No. 10 of 2018, It was a lifeline that holds many gains and rights that protect their rights and guarantee them a bright future and put them on the list of priorities of the state, The law guarantees providing a safe environment for people with disabilities, and not being subjected to economic or commercial exploitation or affecting any of their rights. The law guarantees the conduct and promotion of research related to the rights of people with disabilities, providing a safe environment for people with disabilities.

In response to the human conscience, the laws of God, the commandments of the Prophet and human laws towards people with disabilities in general, their right to a better life and overcoming the obstacles facing them, from here the idea of research came to design a gauge for the Egyptian banknotes denomination, The gauge combines simplicity, ease of use, low cost and potential for use by different social and age groups with visual disabilities. The research solves the problem of identifying denominations of Egyptian banknotes, for one pound, five pounds, ten pounds, twenty pounds, fifty pounds, one hundred pounds and two hundred pounds, this gauge is the first of its kind in Egypt, which is characterized by the measurement of the seven denominations of banknotes of variable length and width. This compact gauge different from the previous gauges, which were intended to measure 4 banknotes denominations with variable width and fixed length represented by the sterling pound or the other gauge which measure 5 banknotes categories of the New Zealand dollar with fixed width and variable length.

One of the research results that the design of this gauge was exceeded all the difficulties faced by people with visual disabilities during use smart mobile applications to identify the different Egyptian banknote denominations, which require expensive smart phone, up to date applications and a certain age category of peoples can be familiar with modern technology In addition to the condition of smart phone and the charge of the battery to perform the purpose of the application.

It is worth mentioning that the Egyptian banknote gauge covered all categories of the people with visually disabilities, whether whom of learned Braille method or those who didn't learn. because the combined of embossed numbers of the banknote denominations in Arabic were integrated alongside with the Braille embossed numbers language, which made it easy to identify the denominations of the banknotes for all visually disabilities peoples.

By measuring the effectiveness of the Egyptian banknote gauge on a person with visual disabilities, I tested group of people consists of 30 persons, their ages between 14 to 58 years old, some of them use smart phone applications, and long-practiced in Braille language, and the rest don't use smart phones, and don't learn the Braille language, The overall result was satisfactory in favor of using the Egyptian banknote categories gauge by 85%.

This research recommends that the Central Bank of Egypt (CBE) distributes the Egyptian banknote gauge on banks operating in Egypt to distribute it to their visual disabilities customers to help them identify the denominations of Egyptian banknotes. As well as raising awareness of the use of the Egyptian banknote gauge and it's important to protect the people with visually disabilities and facilitate the process of banknote exchange between them and others to practice their daily life easily and safely.

Key words: Banknote Design, Banknote Gauge, Banknote Features for blind, Banknote Measuring device, Vision Impaired Community, Currency Features, The Blind, visual disability, the Visual Rights of People with Disabilities.