

Educational illustrated book "Don't forget your feet"

Development status

Phase 4

The transition from the prototype to the final and fully functional form. At this stage, the prototype is already fully tested, or the technology is certified and ready for mass deployment.

IP protection status

Book: Author's work; Pexeso:
Community industrial design
008915474-0001

Partnering strategy

Collaboration, licensing, spin-off



Institution



Tomas Bata University in Zlín

Challenge

The motivation for the development and commercialization of this topic was the fact that it is a contemporary population problem in Czech society. In the Czech Republic, musculoskeletal disorders in adults are the second most common cause of long-term disability and account for 18% of all cases of disability with an average duration of illness of 2 months. The average length of hospitalisation is one of the longest, with an average age of approximately 50 years (data source: ÚZIS). The causes of this condition should be sought as early as childhood, when muscular imbalances develop due to improper loading of the musculoskeletal system, leading to postural disorders". The second motivating element was the uniqueness of the treatment both in terms of content (the topic has not been treated in this form before) and in terms of interactivity, i.e. the solution brings innovation in the form of an interactive educational booklet using animations, video exercises and a manual and QR code.

Description

The issue of foot deformities and functional problems is addressed by podiatry, which takes care of foot health and prevention is significantly reflected in the health of adult feet. The illustrated book thus offers children the opportunity to change bad habits in childhood and avoid problems in adulthood. It focuses primarily on the acquisition of habits that promote proper foot development and the prevention of pathological changes. The illustrated book is part of a comprehensive podiatric educational tool that helps children, their parents and educational staff to learn about the function and importance of the feet in the human musculoskeletal system in an entertaining way (podiatry is a science dealing with the study of the foot, its anatomy, physiology, pathophysiology, diagnosis and treatment). The main element of the solution is the creative processing of children's stories, which are aimed at acquiring habits that promote the proper development of the feet and the musculoskeletal system of children. The stories are designed into 10 themes, one theme per two pages of the book. This is a full-colour book that includes illustrations in addition to the brief text. These illustrations illustrate a specific topic, e.g. how to take care of

the feet and what happens when the feet are not taken care of, etc. As part of the innovative design of the book, the illustrated topics are QR-coded on each double page. By scanning the QR code via the mobile app, a simple animation with a saying or a set of video exercises depicting a movement activity (e.g. correct exercise, walking, nail cutting, etc.) is played under one QR code. The methodological manual is an integral part of the illustrated book. Thanks to it, the individual chapters and practical exercises can be understood correctly and is intended for parents or teaching staff. The illustrated book is linked to the content and themes by a memory game, which helps to repeat the newly acquired information. The whole set is complemented by colouring pages that illustrate the execution of various postures and movement activities that promote the correct development of the legs and posture.

Commercial opportunity

The outputs are conceived in the form of an educational package, a book, a memory game, a colouring book, a methodology and have been offered for commercial use by publishing houses in the Czech Republic. Currently, the educational package *Nezapomň na nohy* (Don't forget your feet) is published by Host Brno and distributed through a network of bookshops and libraries to target groups. Target groups: B2C market: a) the primary target group is children aged 4 - 6 and 6 - 8 years whose musculoskeletal system is still developing and prevention still makes sense (statistics show a high market potential - in the school year 19/20 there are 374,800 children in kindergartens in the Czech Republic, 318,500 children in kindergartens older than 3 years, 108,000 pupils in the first grade in the Czech Republic), b) secondary target groups are parents of children, state and private kindergartens, children's centres, or libraries. The B2B market target group consists of publishers in the Czech Republic. The whole set is primarily intended for children and teachers in kindergartens and primary schools, parents and the general public. However, it could also find its application in the healthcare sector. The creation of the book is a new and unique solution for the care of foot health and posture of the whole body. The reader can thus be one step closer to a healthier lifestyle and reduce subsequent problems with the structure and posture of the body.