



肌智樂園

數碼運動智能培育平台 - 肌智樂園

Digital Physical Quotient and Learning Platform (DPQ Learning Platform)



簡介

由香港理工大學康復治療科學系黎婉儀教授帶領的研究團隊，於2023年獲教育局優質教育基金 (e-Learning Ancillary Facilities Program) 撥款資助建立《肌智樂園》。

研究團隊主要由香港理工大學康復治療科學系副教授黎婉儀教授 (職業治療)、伍尚美教授 (物理治療)、科學主任方曉行博士及教育和軟件開發方面的專業人士組成。

我們致力於提供優質的教育資源和專業的指導，通過適應性和互動性的訓練，幫助學童實現全面的身心發展，為他們的未來奠定穩固的根基。通過《肌智樂園》，讓學童在有趣的訓練中，同時提升他們的身體協調能力、精細動作技能和認知思維等能力，讓他們能夠享受獨特且有益的學習體驗，不斷成長和進步。

特別鳴謝優質教育基金對《肌智樂園》的支持。

服務及資源

《肌智樂園》集結了各領域的專業知識和資源，由大學的相關教授及專家、教育心理學家、科技公司及商界組成的跨界協作平台。《肌智樂園》所提供的評估及訓練內容，可使學童得到最適切培育。透過教育、康復和科技，瞭解個別學童的發展特質，以便及早識別和提供支援，讓學童充分發揮其潛能和實現個人成長。

理念

如何促進學童發展？有良好的學習能力是十分重要的，尤其是認知、大肌肉和小肌肉這三大範疇，對他們的學習和日常生活的參與有深遠影響。及早識別和及早支援能讓學童發揮其潛能，專業的評估是訓練的基礎，同時個人化的訓練能更有效的提升學童的能力。

《肌智樂園》提供專業評估和個人化訓練活動，評估和訓練的設計建基於兒童發展、感知肌能、認知心理學和鷹架等理論和科學研究，以電子學習平台為媒介，為學前及初小的學童提供適切的支援。

《肌智樂園》的訓練活動採用遊戲化的理念，讓學童愉快地和自主地學習。

《肌智樂園》能記錄學生的進展，優化學校、家長和專業人員之間的溝通。

本團隊希望通過《肌智樂園》，填補現有的服務缺口，為學校、學童和家長提供更好的支援。

特色

- 由專業人士設計的評估和訓練項目
- 記錄學童的發展歷程
- 專題式的訓練課程
- 遊戲化和個人化的訓練活動
- 擴增實境的互動體驗
- 培養學生自主學習
- 讓教師輕鬆地查閱結果
- 學童可在家或在學校自主完成訓練

Introduction

Led by Prof. Cynthia Lai from the Department of Rehabilitation Sciences at The Hong Kong Polytechnic University (PolyU/RS), the research team received funding from the Education Bureau's Quality Education Fund (e-Learning Ancillary Facilities Program) in 2023 to establish DPQ Learning Platform.

The research team primarily consists of Prof. Cynthia Lai, Associate Professor of PolyU/RS (with Occupational Therapy background), Prof. Shamay Ng, Professor of PolyU/RS (with Physiotherapy background), Dr. Gabriel Fong, Scientific Officer of PolyU/RS, and professionals in education and software/hardware development.

DPQ Learning Platform is designed for children aged 3 to 8, focusing on key developmental milestones in physical and mental growth. It emphasizes three main areas: gross motor skills, fine motor skills, and cognition, providing targeted professional assessments and training.

We are committed to providing high-quality educational resources and professional guidance. Through adaptive and interactive training, children can enhance their motor coordination, manual dexterity, and cognitive thinking abilities while enjoying a unique and beneficial learning experience.

Special thanks to the Quality Education Fund for supporting DPQ Learning Platform.

Services and Resources

DPQ Learning Platform integrates expertise and resources from various fields, forming a cross-disciplinary collaboration platform comprising university professors and experts, educational psychologists, technology companies, and the business sector. The assessments and training provided by DPQ Learning Platform allow children to receive the most suitable/appropriate support.

By leveraging education, rehabilitation and technology, we gain insights into each child's developmental characteristics, enabling early identification and support to help children unlock their potential and achieve personal growth.

Philosophy

How can we promote children's development? Strong learning abilities are crucial, particularly in the three key areas of cognition, gross motor skills, and fine motor skills, which significantly impact their learning and daily life participation.

Early identification and support allow children to realize their potential. Professional assessments form the basis for training, while personalized training effectively enhances children's abilities.

DPQ Learning Platform provides professional assessments and personalized training activities. The design of assessments and training is grounded in theories and scientific research on child development, sensory-motor functions, cognitive psychology, and scaffolding, delivered through an e-learning platform to provide appropriate support for preschool and early elementary school children.

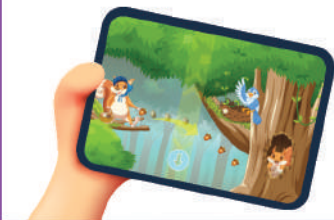
The training activities in DPQ Learning Platform adopt a gamified approach, enabling children to learn joyfully and autonomously.

DPQ Learning Platform can records students' progress, facilitating communication between schools, parents, and professionals.

Our team aims to bridge existing service gaps through DPQ Learning Platform, providing better support for schools, children, and parents.

Features

- Assessments and training programs designed by professionals
- Tracking of children's developmental progress
- Thematic training courses
- Gamified and personalized training activities
- Interactive augmented reality experiences
- Fostering autonomous learning in students
- Teachers can easily access and review the results
- Allowing children to complete training autonomously at home or school



數碼運動智能培育平台 - 肌智樂園

Digital Physical Quotient and Learning Platform (DPQ Learning Platform)

對象

學童

學童擁有《肌智樂園》自己的帳號，透過《肌智樂園》來進行大肌肉、小肌肉和認知三個範疇的評估及訓練。根據學童的年齡、能力和興趣，學童可在家或在學校參與精選(被委派的任務)或自選的訓練活動。每一次的訓練都會被《肌智樂園》記錄下來，讓學童了解自己的表現和進展。

教師

在學校，教師可使用《肌智樂園》自動化及預設的評估項目，為學童進行評估，以及早瞭解學童個別能力，並及早提供支援。透過《肌智樂園》，教師還可以輕鬆地查閱結果。根據個別學童的情況，教師可以為他們編寫更適合的教案，優化課程設計。教師可以參與由《肌智樂園》提供的教師培訓，有助於教師的專業發展。

家長

家長可以透過《肌智樂園》，瞭解小朋友們發展情況的進度，與子女一起進行家居訓練，隨時瞭解子女的評估結果和訓練進度，以便跟學校或專業人士溝通。

校方

《肌智樂園》的研究團隊將會提供教師培訓，提供跨專業的合作。《肌智樂園》的評估及訓練報告將有助於學生升學或轉學的銜接服務。

Target Audience

Children

Children have their own DPQ Learning Platform accounts, through which they can undergo assessments and training of the three key areas of gross motor skills, fine motor skills and cognition. Based on their age, abilities, and interests, children can participate in assigned or self-selected training activities at home or school. Each training session will be recorded by DPQ Learning Platform, allowing children to understand their performance and progress.

Teachers

At school, teachers can use DPQ Learning Platform's automated and preset assessment tools to evaluate children, gaining early insights into their individual abilities and providing timely support. Through the DPQ Learning Platform, teachers can easily access and review the results. Based on individual needs, teachers can tailor lesson plans to optimize curriculum design. Teachers can also participate in professional development through training provided by DPQ Learning Platform.

Parents

Parents can use DPQ Learning Platform to track their children's developmental progress, engage in home-based training with their children, and stay informed about assessment results and training progress, facilitating communication with schools or professionals.

Schools

The DPQ Learning Platform research team will provide teacher training and foster cross-disciplinary collaboration. The assessment and training reports generated by DPQ Learning Platform will support students' transitions during school admissions or transfers.

項目負責團隊 Project Team



黎婉儀教授 Prof. Cynthia LAI,
PhD, OTR, HKROT

香港理工大學康復治療科學系 副教授
Associate Professor, Department of
Rehabilitation Sciences, The Hong Kong
Polytechnic University



伍尚美教授 Prof. Shamay NG,
PhD, MAppSc, PDPT

香港理工大學康復治療科學系 教授(物理治療)
Professor (Physiotherapy), Department of
Rehabilitation Sciences, The Hong Kong
Polytechnic University



方靖行博士 Dr. Gabriel FONG,
PhD

香港理工大學康復治療科學系 科學主任
Scientific Officer,
Department of Rehabilitation Sciences, The
Hong Kong Polytechnic University

開發機構 Developing Organization



支持機構 Supporting Organization



聯絡我們 Contact Us

Email: dpq@polyu.edu.hk

Tam Wing Fan Rehabilitation Service Centre
(Occupational Therapy)
譚榮芬康復治療中心(職業治療)
Phone No.: 2766-6723

Prof. Cynthia Lai
Phone No.: 2766-6710

Website: <https://www.dpqland.com>

了解更多 Learn More

