

2017年度定例研究会報告

Academic-Industry Collaboration Research for Sports Equipment

劉 強

Academic-Industry Collaboration Research for Sports Equipment

Chiang LIU

Academic-Industry Collaboration Research for Sports Equipment

劉 強
Liu Chiang


chiangliu1974@yahoo.com.tw



運動器材科技研究所
Graduate Institute of Sports Equipment Technology

Take home messages

- How to use scientific principles and facilities to Sport Equipment design and study
- Thinking about sport equipment and focusing on functional design, not fashion design.
- Be imagination, creation and innovation for sport equipment design and study.




MIT 微學

Wei-Yin Chen, LHP #54




Est. 2004



運動器材科技研究所
Graduate Institute of Sports Equipment Technology

Major Labs in iSET



5

Unique classes in iSET



Trip of visiting sport equipment company

6

Unique classes in iSET



Visiting sport equipment exhibition and invention exhibition

7

Unique classes in iSET



Innovational design competition

8

Components of sport equipment design



Background of students



SPORTS RESEARCH 2014
ISSN 1751-3758
http://www.informalpub.com/10.1015/1077-0478

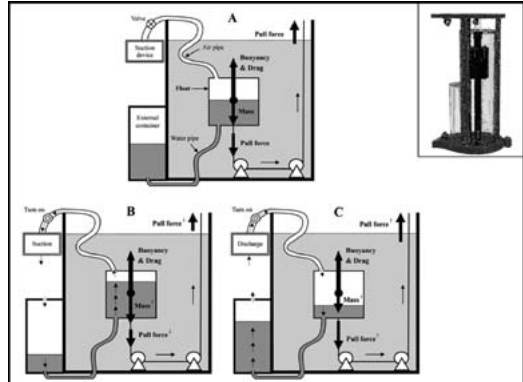
Routledge
Taylor & Francis Group

Resistance characteristics of innovative eco-fitness equipment: a water buoyancy muscular machine

Wei Han Chen¹, Ya-Chen Liu², Hsiung-Hao Tai³ and Chiang-Lip⁴

¹Department of Physical Education, National Taiwan Normal University, Taipei, Taiwan; ²Nan-Shan Institute of Sports Equipment Technology, University of Taipei, Taipei, Taiwan; ³The Office of Physical Education, Chung Hua University, Muzha, Taiwan; ⁴The Office of Physical Education, Chien Mei University of Science and Technology, Taiwan, Taiwan

浮力
Free



Types of sport equipment company

Original Equipment Manufacturer (OEM)
only manufacture product.

Original Design Manufacturer (ODM)
manufacture + design new product

Original Brand Manufacturer (OBM)
manufacture + design + own brand

Types of studies with company

- **Totally solution:** idea, functional design, scientific evidence through experiment, feedback and publication.
- **Testing:** to exam the prototype whether meet the functions or do any effects.
- **Comparison:** to compare between the new product and competitor's one.
- **Certification:** to evaluate the equipment whether meet the standard or not.

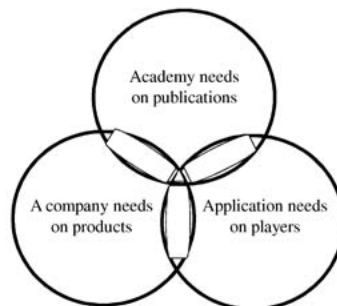
22

What can we provide to company?

- Knowledge.
- Idea.
- Scientific evidence for their product.
- Further information which they never think it before.

23

The Win-Win-Win situation



24