Outcome-Based Learning Design for Enhancing Total Student Experiences in the Digital Era

Dr. Pamela Kwok
Division Head, Division of Business
Hong Kong Community College,
The Hong Kong Polytechnic University

Professor Bob Fox
Office of PVC (Education)
University of New South Wales
Australia

Introduction

❖ Blended Learning has become a popular practice in education sector during the past decade

❖ It provides **flexible and convenient benefits** to students
 (e.g. accessing to the learning materials **anytime & anywhere**)

❖ Technological advancement provides **additional means** to engage students (e.g. smartphone, Skype and social media like Facebook (with fb messenger), WhatsApp, Instagram, Twitter, LinkedIn, YouTube, Snapchat, & Line)

❖Technology **facilitates and enriches student-centered learning experiences** such as flipped-classroom, MOOCs (Massive Open Online Courses).

Objective & Method (case study approach)

❖ Objective:

Attempts to **explore the development of blended learning (BL)** in both Australia and Hong Kong through **multiple real-life cases**.

An **"OBE RASE" Learning Design Model** (Fox, 2015) - **enhancing learning experiences and teaching quality** especially open & blended learning

❖ Method (case study (Yin 1984))
-A **longitudinal approach** to **observe and record BL at the micro level**

❖Cases from Australia and Hong Kong
-illustrate **changes and lessons learnt** at different stages of BL with adoption of technology

Literature Review – Some Highlights

❖ Blended learning (BL) with embedded technology has become **more popular** in higher education and **with increased focus on personalized, student needs** (Gaeta, Orciuoli & Ritrovato 2009)

❖ Further growth of technology-based BL is **limited** due to **low digital literacy skills** of academics and **limited** institutional support

❖ In addition to student-centered practices, academics play a ke**y role in learning design with usage of information technology** for **engaging** students and facilitating **deep learning** (Biggs, 2014)

❖ "OBE RASE" Learning Design Model – based on the extending the "RASE" (Churchill, King & Fox, 2013)) *An integrated, aligned curriculum learning design model

❖ An **effective** learning experience design can engage and create memorable educational experiences → **enriching total student learning experiences**.

Case Study : Australia & Hong Kong

1) Distance Course Re-engineered for Blended On-campus Delivery to 750 students p.a. (Australia) 1988-90 (P/T mode → P/T + F/T modes)
- **Practicing nurses** in rural/regional Western Australia – **upgrade** diploma to degree - weekly videos (lab equip. experiments & demos, etc.) broadcast on regional TV
- activity-led print-based study guides, weekly tasks, readings and resources
Lesson learnt – **(Key factor for success)** with **support** from leaders (**Dean**) quality BL courses can be successfully & **sustainably** re-purposed to meet needs of large numbers of students

2) Civil Engineering First Year Course Converted Using Personalized System of Instruction (PSI) (Australia) * Core course 120-250 students – 1988
- **Problem/activity-led printed study guides** ("STEM" subjects)
- on-campus students 'buy-at-cost' study guides from bookshop
- 'Lectures' – became **small group & individual tutorials** (i.e. **No lecture** for students)
- Advanced students – complete activities early in own time, then focus on other courses
-Lessons learnt – without faculty buy-in, individual **teacher isolated and their efforts ultimately fail (after 5 years' successfully experiences)**

Case Study: Australia & Hong Kong

3) Sociology (*1990s – downward trend in student numbers across all programs in School of Sociology (Australia)

-Threat of **merger or closure** led to review and find solution:

-Programs review

-Distance education methodology for both on- and off-campus students

-**Shared resources**, shared classes (i.e. same lecture but with different tutorials)

Lesson learnt- **necessity is the mother of invention**

4) Marketing course (Hong Kong) – student with diverse needs

- Facebook to supplement Moodle

- online material and YouTube videos to facilitate student learning

- traditional face-to-face consultation, email, eForum and
   smartphone are adopted as communication channels with students

- **student-centered and peer sharing activities** (in-class and online)

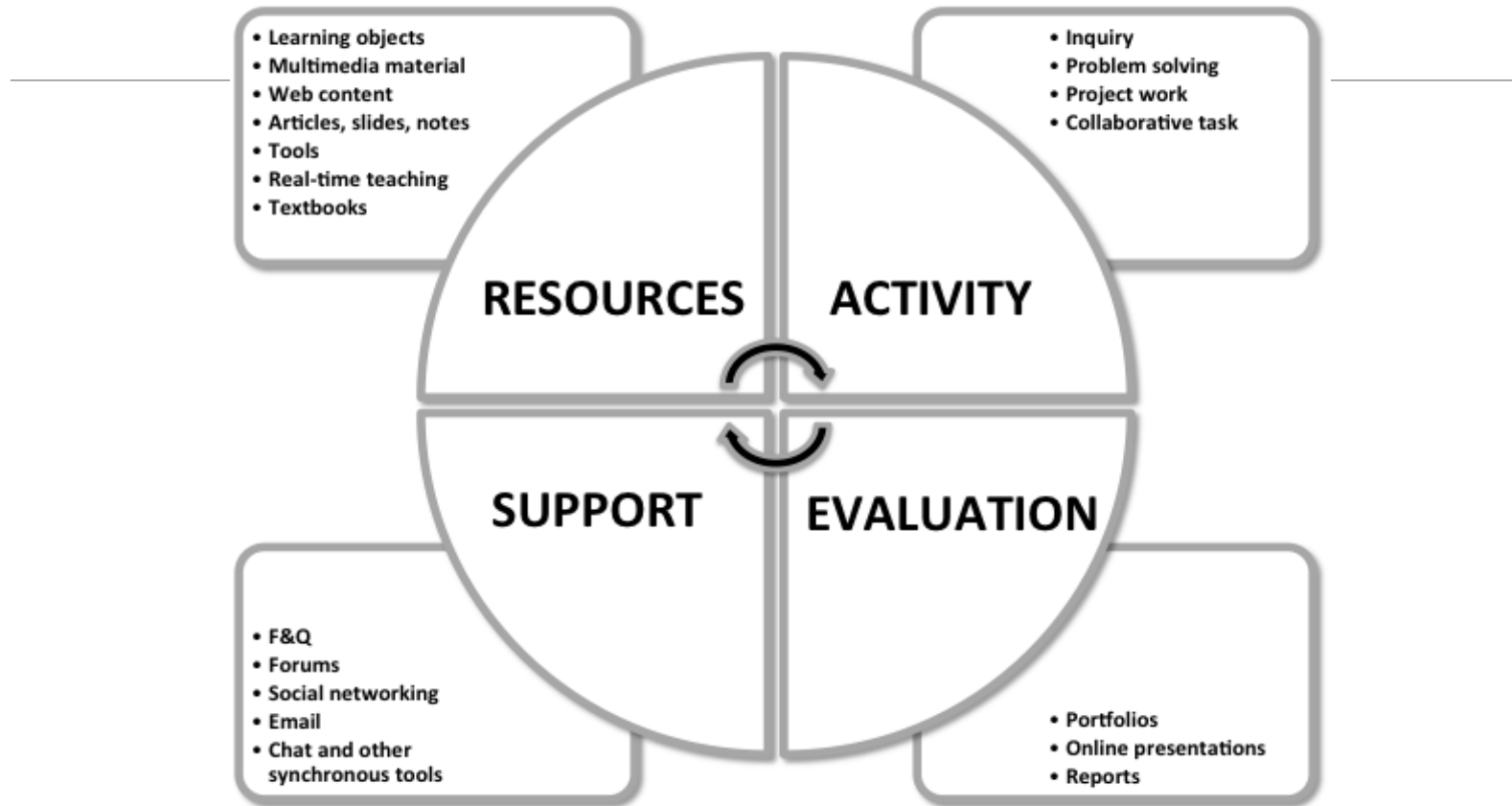Lesson learnt – **flexibility and sustainably** (keep it simple)

An "OBE RASE" Evidence-based Learning Design Model
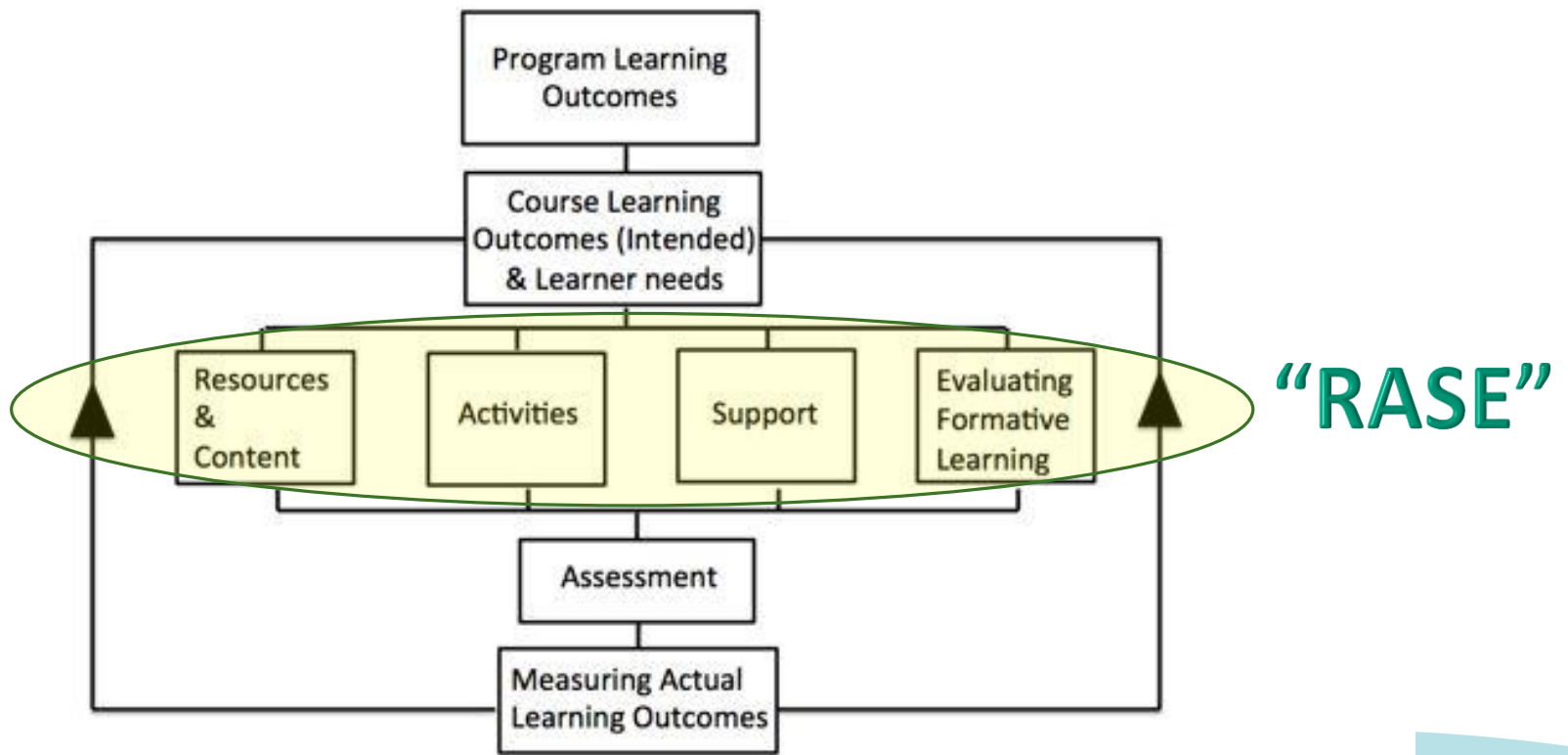
Source: Fox, 2015

What is "RASE"?

The figure below is a visual summary of the RASE pedagogical model.

Figure 1: RASE pedagogical model

An "OBE RASE" Evidence-based Learning Design Model

❖ **Program Learning Outcomes (PLOs)** - knowledge, skills and applications that students are expected to demonstrate in **completing a program** of study.

❖ **Course Learning Outcomes (CLOs)** prescribe the knowledge, skills and applications that students are expected to demonstrate in completing a **specific course**.

❖**Learner Needs** are the individual students' needs catered for **to ensure their greatest** possible **engagement** in learning.

❖**Course Components** are the combination of resources, activities, support and feedback/evaluation (formative assessments) required for **full achievement of course learning outcomes.**

❖**Assessments measure** actual learning outcomes. Assessment methods can be **formative or summative.**

❖**Measuring Actual Learning Outcomes** ensures that the student can demonstrate they have **attained the intended learning outcomes of the course and program**.

Conclusions

Student-centered & Evidence-based:
Curriculum design/development, teaching & research

Sustainability: requires student/teacher/faculty/institution all work together for supporting student learning

Technology: only a tool to facilitate teaching and learning activities

Be Open/Creative: Trialling new teaching and learning practices

Senior management commitments and clear direction for supporting blended learning are important

References

Biggs, J. (2014). Constructive alignment in university teaching. HERDSA Review of Higher Education, Vol. 1, 5-22.

Churchill, D., King, M, & Fox, B. (2013). Learning design for science education in the 21st century. Journal of the Institute for Educational Research 45 (2), 404-421.

Fox, B. (2016). Flexible Frameworks for Blended Learning in Higher Education. In Cermakova, K. & Rotschedl, J. (Eds.), Proceedings of the 3rd Teaching & Education Conference 2016 (pp.104-112). Barcelona: International Institute of Social and Economic Sciences (IISES).

Fox, R. (2015). The rise of open and blended learning. In K.C. Li, & K.S. Yuen (Eds.), Studies and Practices for Advancement in Open and Distance Education (pp. 93-103). Hong Kong: Open University of Hong Kong Press.

Mirriahi, N., Alonzo, D., & Fox, B. (2015). A blended learning framework for curriculum design and professional development. Research in Learning Technology.

Ng, C., Fox, R. & Nakano, M. (2016) (Eds), Reforming learning and teaching in Asia-Pacific Universities: Influences of Globalised Processes in Japan, Hong Kong and Australia. Singapore: Springer.

Yin, R. K.(1984). Case Study Research: design and Methods, Beverly Hills, Calif: Sage Publications.

Thank You