EBooks as teaching strategy - preliminary investigation

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Learn
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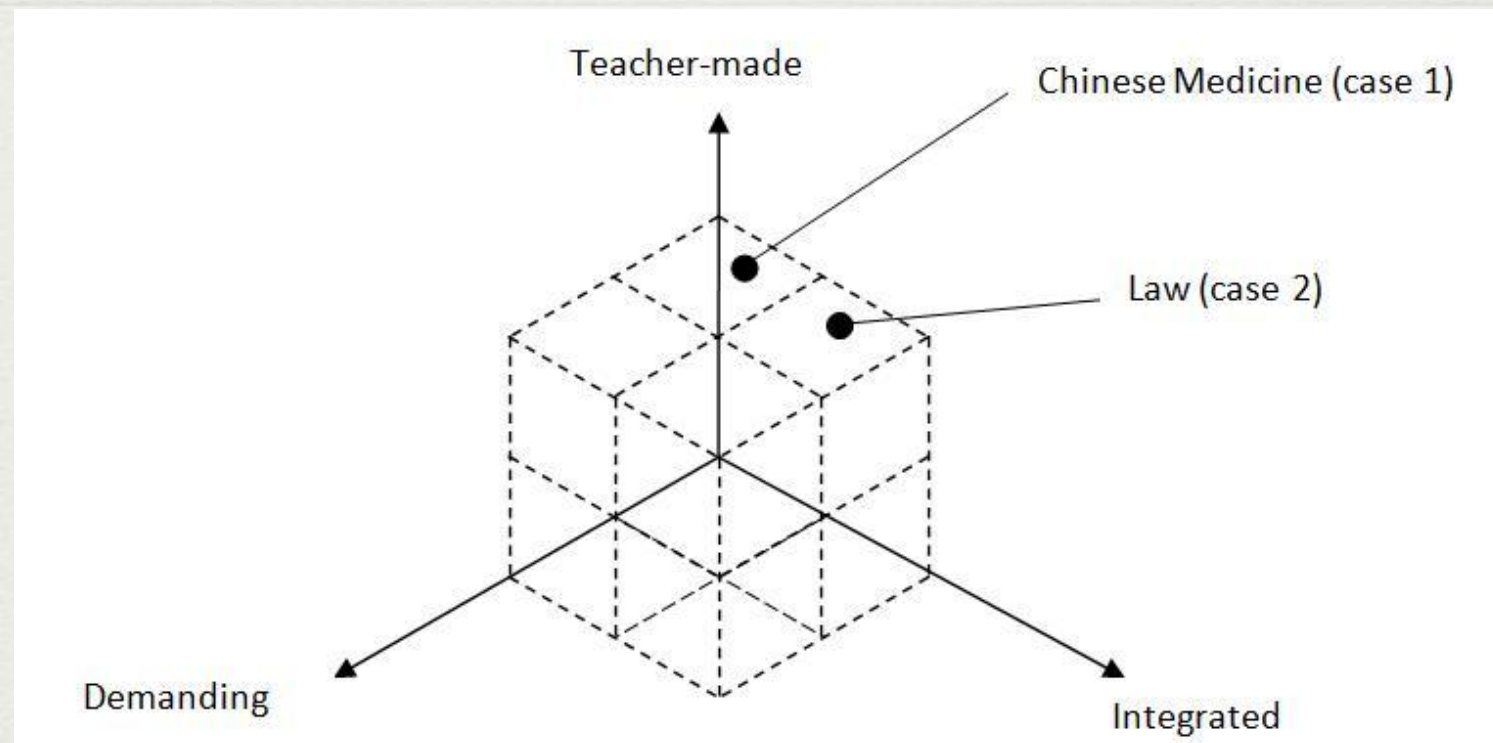香港中文大學
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Benefits of eBooks

- Convenience

- eReader usually provides many features
  (e.g. full text searching, customizable font size, mark-up, or even note taking.)

- The content of an eBook can be supplemented/ enhanced with multimedia

Model explaining various designs of eBook teaching strategies

Dimension 1: (vertical component of the diagram)
  Teacher-made vs. **commercially-prepared materials**

Dimension 2: (bottom left component of the diagram)
  Hardware demanding vs. **less-demanding designs**

Dimension 3: (bottom right hand component of the diagram)
  Integrated vs. **non-integrated approaches**

Dimension 1:
Teacher-made vs. commercially-prepared materials

	Typical teacher-made eBooks	Typical commercial eBooks
Customization	Can be customized easily by teachers	Difficult to fulfill the exact requirements of a course
Workload by teacher	Construction of tailor-made eBooks represents substantial effort from teachers	Less effort to be adopted by teachers
Cost	Available to students free of charge	Students may need to pay for their own eBooks
Restriction of use	No Digital Rights Management (DRM) restrictions	Digital Rights Management (DRM) restrictions (A great deal of inconvenience to its users (Turner, 2005))

Dimension 2:
Hardware demanding vs. less-demanding designs

	Hardware demanding	Less-demanding
Requirement of the devices	Designed for high-end devices	Designed for low-end mobile phones/ devices
Cost	Students may need to buy new devices (Supported devices are usually expensive)	Students may use their existing devices
Features	Provision of many features (e.g. multimedia)	Usually limited in functionalities The screens of these mobile devices are usually small
Personalization	Easy for personalization Gupta and Gullett-Scaggs (2010)	Fewer personalization features

Dimension 3:
Integrated vs. non-integrated approaches

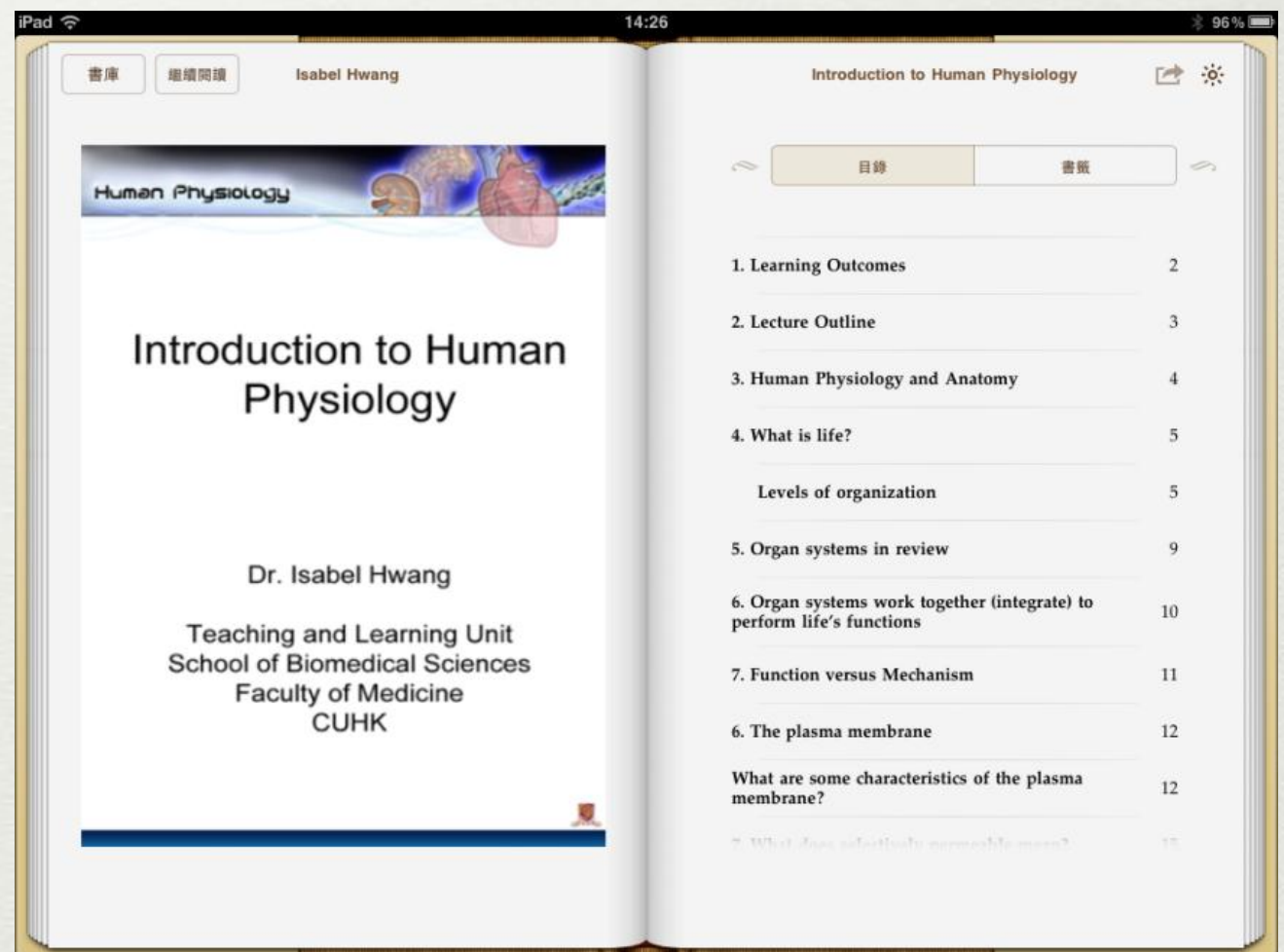| Integrated approaches	Non-integrated approaches
eBooks used as textbooks (Essential materials of a course)	eBooks used as reference materials (Supplementary materials of a course)

The study - eBooks formats

Two kinds of eBook format:
- JAVA version for traditional mobile phone
- ePUB version for Smartphone

JAVA version

ePub version

The study

- 2 cases have been conducted in 2010

  - The School of Chinese Medicine

  - Faculty of Law

Case 1 - Chinese Medicine

- Traditional mobiles were used in this project
  (non-hardware demanding [JAVA-based eBooks])

- eBooks were not required components of the curriculum but supplementary reference materials.
  (not integrated into curriculum)

- The contents of the eBooks were prepared by the teachers

- 3 workshops were conducted to introduce and familiarize students with these eBooks

Case 1 - Chinese Medicine

- Feedback were collected by using two sets of questionnaires (First impression & Actual usage)

- 31 responses were collected in the first questionnaire during the workshops

- 24 responses were collected in the second questionnaire after three months of actual use.

Case 2 - Law

- 208 students enrolled in this course

- 12 Land Law seminar guides were released week by week

- the materials were integrated into curriculum

- non-hardware demanding

- eBooks were available in multiple formats so as to ensure easy access (eBooks and eDocs)

Case 2 - Law

- Data were collected by using the internal logging system of the Learning Management System (LMS, Moodle in this case)

- The logging was responsible for tracking

   1. the number of access to the website

   2. the number of downloads

Two cases approach
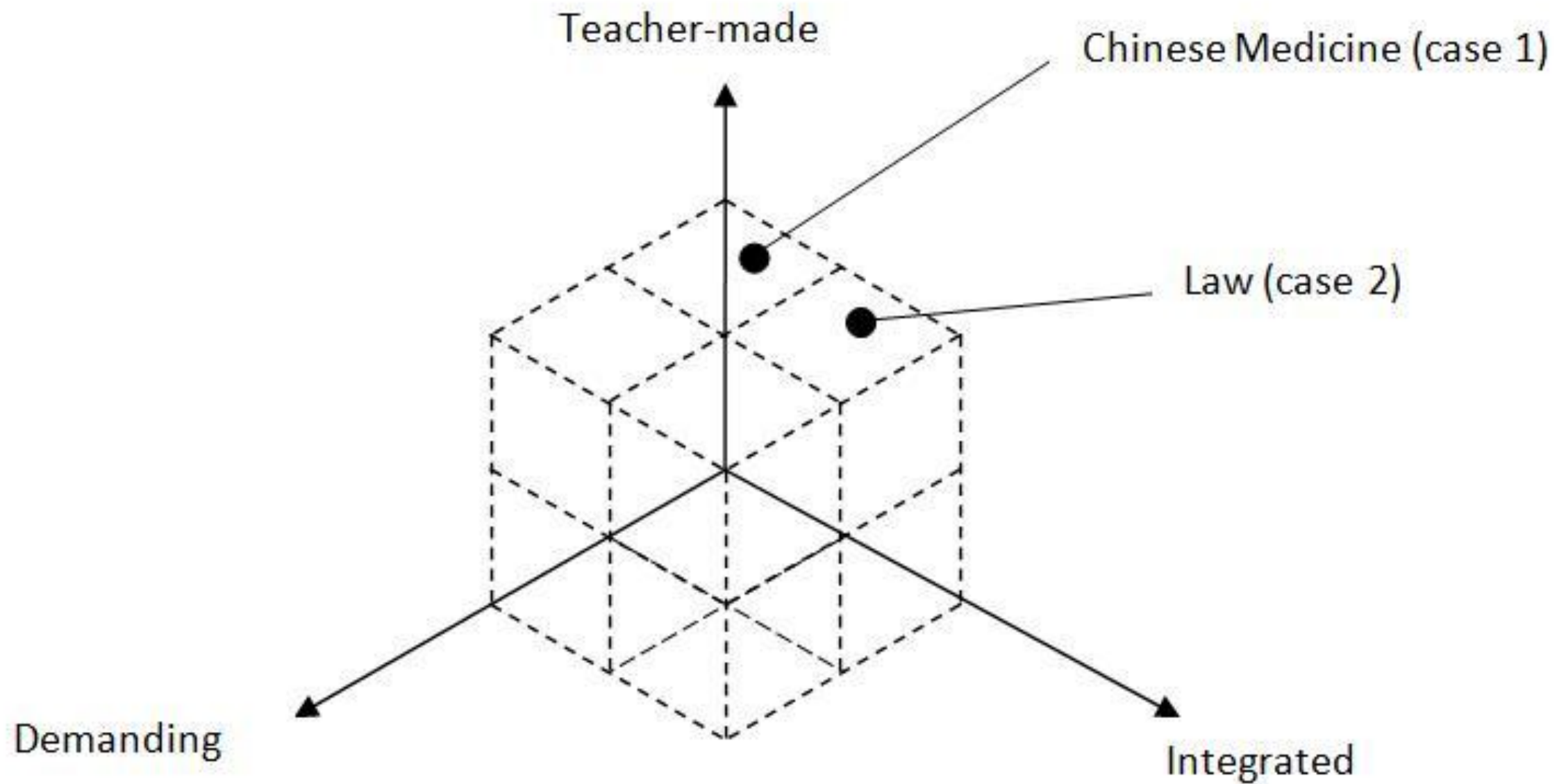
Findings

Case 1 - Chinese Medicine

	First impression		Actual usage	(After three months)
	Mean	Number of responses	Mean	Number of responses
	1 being 'Never' and 5 being 'Always'.			
Do you read eBooks on desktop/ notebook computers?	3.00	31	-	-
Do you read eBooks on mobile phones?	2.17	30	-	-
How often did you read the Chinese Medicine eBooks on mobile phones?	-	-	3.13	24
	1 being 'Strongly disagree' and 5 being 'Strongly agree'.			
I think the Chinese Medicine eBooks are convenient.	4.06	31	-	-
I will like to use the eBooks introduced in the workshop.	4.03	31	-	-
I think the eBooks introduced in the workshop will be useful to me.	4.13	31	-	-
I think I already have the mobile phone on which I can comfortably read eBooks.	3.48	31	-	-
The Chinese Medicine eBooks were easy to operate.	-	-	3.88	24
I think the Chinese Medicine eBooks are important learning tools.	4.00	31	3.79	24
I feel comfortable reading the Chinese Medicine eBooks on a mobile phone screen.	3.71	31	3.25	24

Case 1 - Chinese Medicine

Open-ended question feedback

- Students perceived eBooks to be **portable** and **convenient**

Exact wordings:
"eBooks are portable"
"the mobile phone is convenient, no need to physically bring the ordinary books."
"it (eBooks) is good when we cannot get access to the computer/textbook"
"eBooks are more convenient and handy compare with ordinary books"
"eBooks can contain a wide range of content related to Chinese Medicine topics"
"using the search function, the information can be searched very quickly"
"the eBooks can be used frequently during transportation"

- Despite all of these positive comments, one student noted that "viewing the eBooks on the mobile phone screen for a long time will make the eyes tired"

Case 2 – Law
(eDocuments and eBooks use)
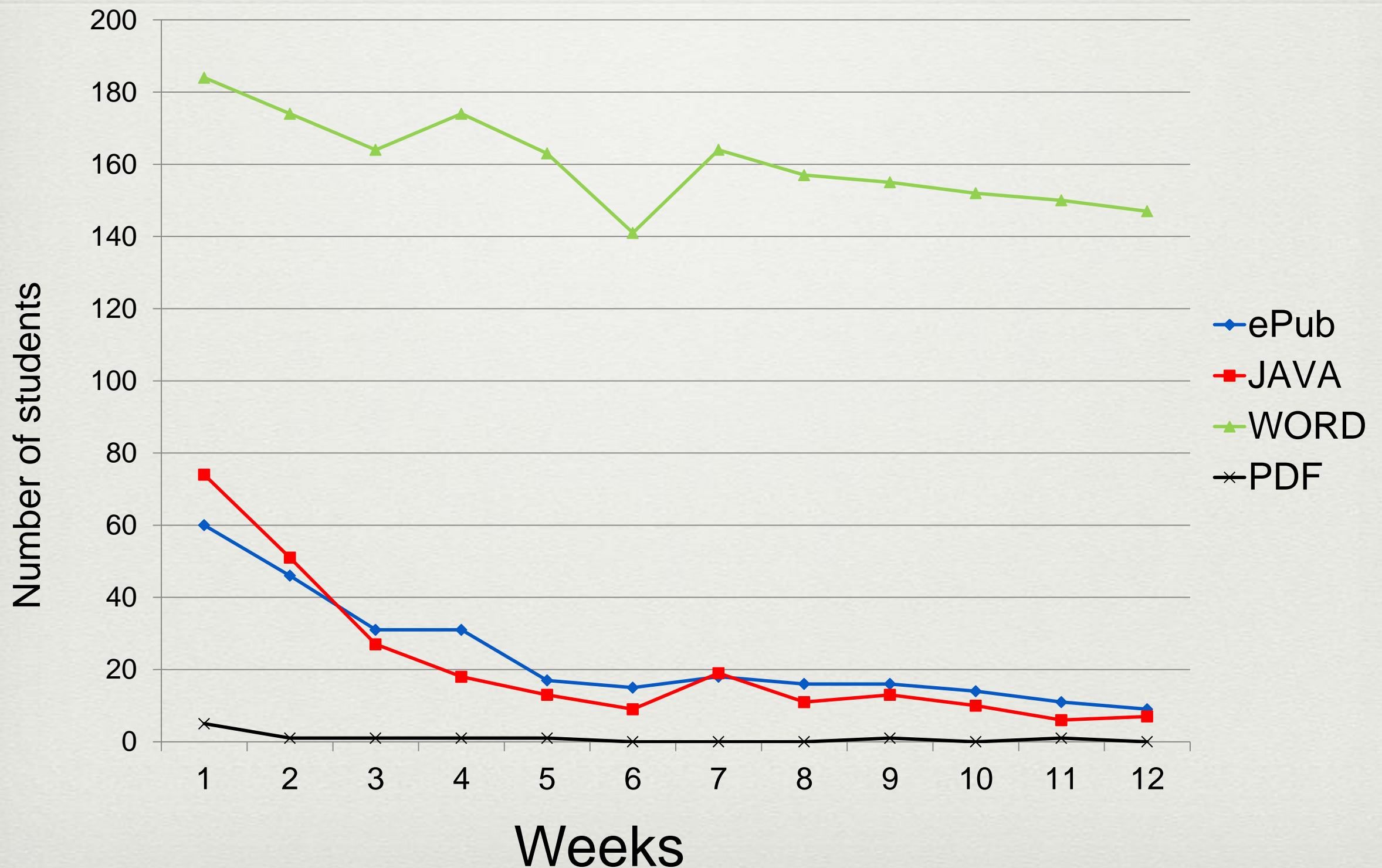
Case 2 – Law
(eDocuments and eBooks use)

- **eBooks - ePub and JAVA**

  - Similar usage for both formats of eBooks

- **eDocuments - WORD and PDF**

  - Both Word and PDF documents are very easy to access via desktop computer

  - Most students used Word documents instead of PDF

  - Reason might be the inflexibility of the PDF format

Case 2 – Law
(The usage of integrated materials)

- eBooks were attracted by students in the first 2 weeks (because of novelty of the technology?)

- Usage of eBooks decreased for the rest of the time

- Usage of eDocuments > usage of eBooks

Discussion

- Teacher-creation of eBooks seemed to be a worthwhile and practical strategy

- Our strategy in reducing the reliance in high-end hardware seemed to be a welcomed tactic as many of the students do not have the high-end devices

- Ebooks seemed to be more useful as references than as textbooks/ required content based on our experiences in the 2 cases.

- Preliminary investigation ONLY!

Q & A

Thank You!