



**Professional Development Programme for Teacher of
Self-financing Tertiary Education in Hong Kong**

Enabling Meaningful Learning of Students

Module 1B

**Designing a curriculum in IA context
- Models of learning: Tools for teaching**

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Recap of Module 1A

What is/are the indicator(s) that a student has learned something?

Such as

- How to make a cup of coffee?
- How to show that two triangles are congruent?

Purposes of teaching???

Meaningful Learning (Def.)

A learner:

- has **mastered the essences** of using the knowledge/skills
- has **integrated** the **new knowledge/skills** into his/her own cognitive system
- can **recall** that knowledge/skills automatically **when needed**

What we will do in this Programme

In Module !A:

- **Conceptualize** meaningful learning
- Explore the **categories of knowledge** a teacher should have **to enable *meaningful* learning**
- **Choose** one category of teacher knowledge **and explore how** this category of knowledge can **contribute to enabling meaningful learning**

What we will do in this Programme

- In Module 1B, we will:
- Look at **examples** leading to meaningful learning
- Have **hands on experiences in designing** meaningful learning experiences
- **Exchange views and experiences** amongst colleagues

Teacher Knowledge

- for enabling *meaningful* learning

1. Subject matter (**content knowledge**);
2. **Knowledge of students**;
 - Ss of different programs/background knowledge
 - Prior learning
 - Learning styles/abilities
3. **General pedagogical knowledge** (or teaching strategies, say lecturing, questioning skill, group discussion, etc.);

Teacher Knowledge

for enabling meaningful learning

4. Positioning of the subject:

- Curriculum knowledge – Horizontal & Vertical

5. General pedagogical knowledge:

- educational contexts,
- the governance of colleges,
- the character of communities and cultures, etc.

6. Purposes of education, in particular the learning of the said content; and

➤ pedagogical content knowledge (PCK).

PH teaching demonstration for illustration of PCK applied

1. Background: a compulsory subject, Intermediate Accounting, of AD in Business (Accounting) Program
2. Subject Intended Learning Outcomes
 - Core of Financial Reporting output
3. Major topics in the subject
4. Topic: Ch.12 Investment
5. Move on to my additional lecture notes for demonstration

IA Intended Learning Outcomes

1. demonstrate a sound understanding of the conceptual framework (Ch.1) of financial reporting, concepts and techniques of accounting,
2. evaluate current accounting practice in light of the accounting principles and standards,
3. apply GAAP (generally accepted accounting principles) to situations, and
4. solve problems and issues in relation to corporate financial accounting.

4 F/S + Notes

Income Statement

Revenues	\$ 37,436
- Expenses	34,136
Net Income	\$ 3,300

①

Statement of Retained Earnings

Beginning Retained Earnings	\$ 6,805
+ Net Income	3,300
- Dividends	(1,000)
Ending Retained Earnings	\$ 9,105

Statement of Cash Flows

+/- Cash Flows from Operating Activities	\$ 1,069
- Cash Flows from Investing Activities	(1,625)
- Cash Flows from Financing Activities	400
Change in Cash	(156)
Cash at the Beginning of Period	5,051
Cash at End of Period	\$ 4,895

③

Balance Sheet

Cash	\$ 4,895
Other Assets	22,366
Total Assets	\$27,261
Liabilities	\$16,156
Contributed Capital	2,000
Retained Earnings	9,105
Total Liabilities & Stockholders' Equity	\$27,261

CCN2121 IA Major Topics



- ❑ Ch.1 Conceptual Framework
- ❑ Ch.2 A/Cing Cycle
- ❑ Ch.3 B/S, Ch.4A I/S, Ch.4B Cash Flow Statement
- ❑ Ch.5 Instalment Sales, LT construction contract
- ❑ Ch.8 & 9 Inventory I & II (Perpetual Vs. Periodic inventory system, LCM, Inventory errors)
- ❑ Ch.12 Investment (HTM, Trading Securities, Available-for-sale Approaches & FV or Equity Method)
- ❑ Ch.13 Contingencies (product warranties, premiums, litigation claims, subsequent events)
- ❑ Ch.15 Lease (Operating Vs. Capital Lease for both lessee and lessor, Direct Financing Lease Vs. Sales-type Lease)
- ❑ Ch.19 EPS (Basic & Diluted EPS, Anti-dilutive securities: Options, Warrants, Rights, Convertible securities)

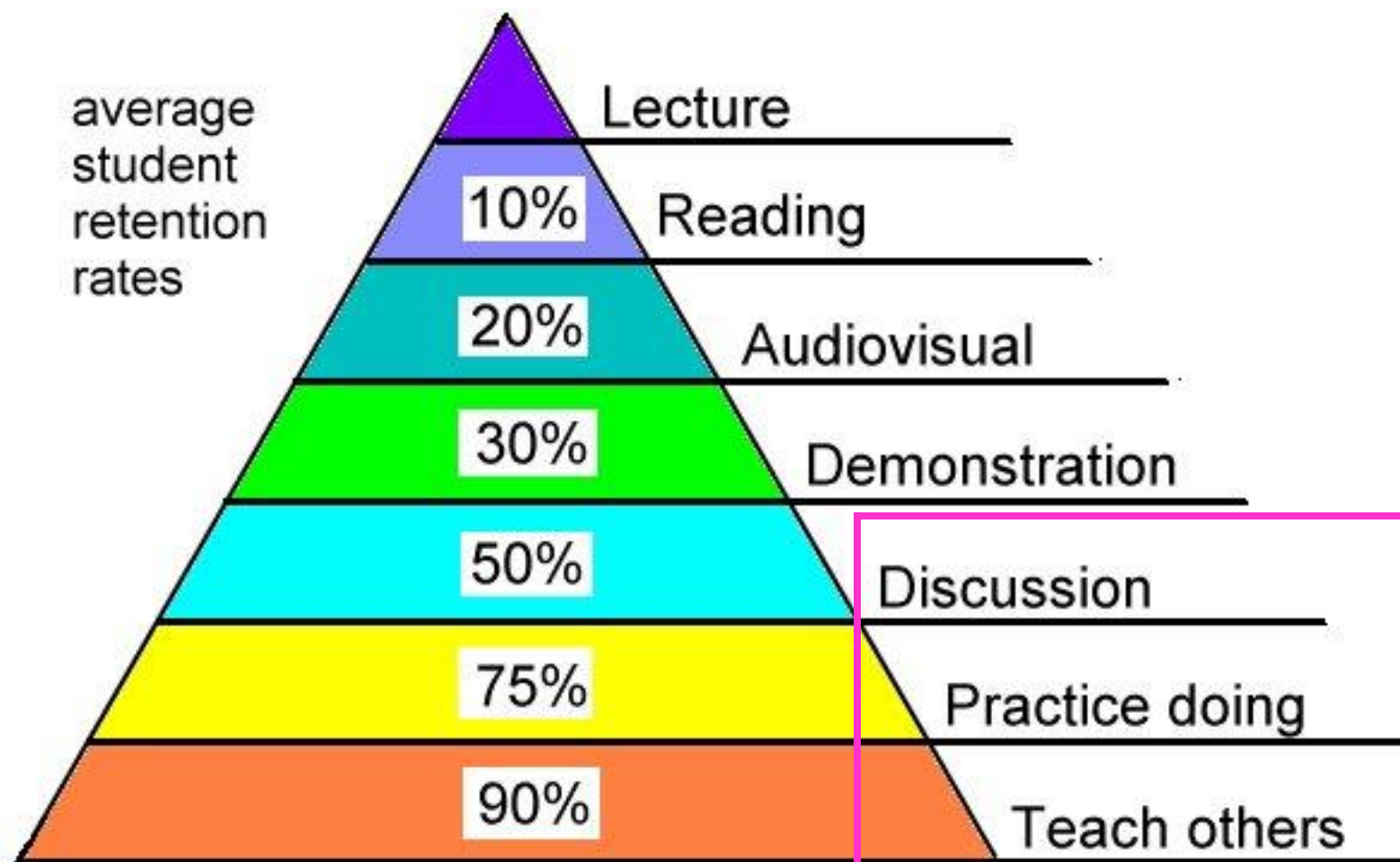
=> **Level 3 subject before!**

=> (Q. List)



Learning Pyramid

average
student
retention
rates



Source: National Training Laboratories, Bethel, Maine

DATE OF ISSUE CERTIFICATE NUMBER TFR. NO. REGISTER NUMBER OF H SHARES
 SFL00025701 05/02/2004 SFL00025701 0025/0000003 HONG KONG *20000*

FORTE 复地

SHANGHAI FORTE LAND CO., LTD.*

復地（集團）股份有限公司

(a joint stock limited company incorporated in the People's Republic of China with limited liability)

CERTIFICATE FOR H SHARES

THE COMPANY WAS REGISTERED AS A JOINT STOCK LIMITED COMPANY ON 27TH SEPTEMBER, 2001 IN THE PEOPLE'S REPUBLIC OF CHINA IN ACCORDANCE WITH THE COMPANY LAW (AS DEFINED BELOW) WITH A REGISTRATION NUMBER OF 3100001006532

THE REGISTERED ORDINARY SHARE CAPITAL OF THE COMPANY IS DIVIDED INTO DOMESTIC SHARES OF NOMINAL VALUE RMB0.20 EACH ("DOMESTIC SHARES") AND OVERSEAS LISTED FOREIGN SHARES WHICH ARE LISTED ON THE STOCK EXCHANGE OF HONG KONG LIMITED OF NOMINAL VALUE RMB0.20 EACH ("H SHARES"). EACH OF THE DOMESTIC SHARES AND H SHARES CARRIES THE SAME VOTING RIGHTS AT GENERAL MEETINGS OF THE COMPANY.

THIS IS TO CERTIFY THAT THE UNDERMENTIONED PERSON(S) IS/ARE THE REGISTERED HOLDER(S) OF FULLY PAID H SHARES OF NOMINAL VALUE RMB0.20 EACH AS DETAILED BELOW IN THE CAPITAL OF THE COMPANY SUBJECT TO THE ARTICLES OF ASSOCIATION OF THE COMPANY AND THE CONDITIONS ENDORSED BELOW.

HKSCC NOMINEES LIMITED
7/F VICWOOD PLAZA
199 DES VOEUX ROAD CENTRAL
HONG KONG

CODE:



NUMBER OF H SHARES:
TWENTY THOUSAND ****

GIVEN UNDER THE SECURITIES SEAL OF THE COMPANY ON THE DATE STATED ABOVE.

CHAIRMAN OF THE BOARD

NO TRANSFER IN RESPECT OF ANY OF THE ABOVE NUMBER OF H SHARES CAN BE REGISTERED UNLESS ACCOMPANIED BY THIS SHARE CERTIFICATE

THE COMPANY'S LEGAL ADDRESS: 9TH FLOOR, 510 CAOYANG ROAD, SHANGHAI, THE PEOPLE'S REPUBLIC OF CHINA

HONG KONG H SHARE REGISTRAR: COMPUTERSHARE HONG KONG INVESTOR SERVICES LIMITED, SHOPS 1712-1716, 17TH FLOOR, HOPEWELL CENTRE, 183 QUEEN'S ROAD EAST, WANCHAI, HONG KONG.

CONDITIONS

BY ACQUIRING THE H SHARES OF THE COMPANY, THE REGISTERED HOLDER(S) OF THE ABOVE H SHARES:

- (i) AGREE(S) WITH THE COMPANY AND EACH OTHER SHAREHOLDER OF THE COMPANY, AND THE COMPANY AGREES WITH SUCH REGISTERED HOLDER(S) AND EACH SHAREHOLDER, TO OBSERVE AND COMPLY WITH THE COMPANY LAW OF THE PEOPLE'S REPUBLIC OF CHINA ("PRC") (《中華人民共和國公司法》) AS AMENDED, SUPPLEMENTED OR OTHERWISE MODIFIED FROM TIME TO TIME (THE "COMPANY LAW"), THE SPECIAL REGULATIONS ON THE OVERSEAS OFFERING AND LISTING OF SHARES BY JOINT STOCK LIMITED COMPANIES (《國務院關於股份有限公司境外募集股份及上市的特別規定》) AND THE ARTICLES OF ASSOCIATION OF THE COMPANY;
- (ii) AGREE(S) WITH THE COMPANY, EACH OTHER SHAREHOLDER, DIRECTOR, SUPERVISOR, MANAGER AND OFFICER OF THE COMPANY AND THE COMPANY, ACTING FOR ITSELF AND FOR EACH DIRECTOR, SUPERVISOR, MANAGER AND OFFICER OF THE COMPANY, AGREES WITH SUCH REGISTERED HOLDER(S) AND EACH OTHER SHAREHOLDER OF THE COMPANY TO REFER ALL DIFFERENCES AND CLAIMS ARISING FROM THE ARTICLES OF ASSOCIATION OF THE COMPANY OR ANY RIGHTS OR OBLIGATIONS CONFERRED

*For identification purpose only.

- OR IMPOSED BY THE COMPANY LAW OR OTHER RELEVANT LAWS AND ADMINISTRATION REGULATIONS CONCERNING THE AFFAIRS OF THE COMPANY TO ARBITRATION IN ACCORDANCE WITH THE ARTICLES OF ASSOCIATION OF THE COMPANY, AND ANY REFERENCE TO ARBITRATION SHALL BE DEEMED TO AUTHORISE THE ARBITRATION TRIBUNAL TO CONDUCT HEARINGS IN OPEN SESSION AND TO PUBLISH ITS AWARD; AND SUCH ARBITRATION SHALL BE FINAL AND CONCLUSIVE;
- (iii) AGREE(S) WITH THE COMPANY AND EACH OTHER SHAREHOLDER OF THE COMPANY THAT THE H SHARES IN THE COMPANY ARE FREELY TRANSFERABLE BY THE HOLDER(S) THEREOF; AND
- (iv) AUTHORISE(S) THE COMPANY TO ENTER INTO A CONTRACT ON HIS OR THEIR BEHALF WITH EACH DIRECTOR, SUPERVISOR, MANAGER AND OFFICER OF THE COMPANY WHEREBY SUCH DIRECTORS, SUPERVISORS, MANAGER AND OFFICERS UNDERTAKE TO OBSERVE AND COMPLY WITH THEIR OBLIGATIONS TO THE SHAREHOLDERS STIPULATED IN THE ARTICLES OF ASSOCIATION OF THE COMPANY.

**Stock
certificate**

Computershare

0026788

Teaching demonstration and discussion

- Topic: Intermediate Accounting Ch.12
Investment
 - Move on to my additional lecture notes for illustration and discussion
 - Please write down what specific PCK I have been applied

Review¹

In this chapter we cover various investments that companies make in the debt and equity (shares or stock) of other companies. In the first part of this chapter, we discuss investments for which the investor cannot “significantly influence” the operating and financial policies of the investee. Some of these investments are accounted for at fair value (trading securities), with changes in fair values reported on the income statement. Others ignore most fair value changes (e.g., held-to-maturity investments) or include fair value changes only in other comprehensive income (e.g., available for sale investments).

In the second part of this chapter we cover the equity method – a completely different way to record and report investments in stock when the investor can “significantly influence” the operating and financial policies of the investee. The equity method ignores fair value changes but includes in the investor’s income statement their share of the investee’s income.

Expected Learning Outcomes

1. Demonstrate how to identify and account for investments classified as held-to-maturity.
2. Demonstrate how to identify and account for investments classified as trading securities.
3. Demonstrate how to identify and account for investments classified as available-for-sale securities.
4. Demonstrate how to account for investments accounted for under the equity method.
5. Explain the adjustments made in the equity method when the fair value of the net assets underlying the investment exceeds their book value.

CHAPTER 12 – Part I

If the investor CANNOT “significantly influence” (i.e. < ???%) the operating and financial policies of the investee, the investment can be accounted for as:

- 1) Held-to-maturity
- 2) Trading securities
- 3) Securities available-for-sale

¹ **PH note:** An investor may choose to account for their debt or equity investments using measurement bases prescribed under IAS No. 39, or they may choose to be early adopters of the new IFRS No. 9 which will become mandatory for periods beginning on or after January 1, 2015.

Part A: Accounting for Investment Securities for which the Investor Lacks Significant Influence

1. Securities to be Held-to-Maturity (HTM)

- A. Only investment in a **bond** or other **debt security**, that have a fixed **maturity** date, and they are typically quoted (**listed**) or publicly traded to be classified as HTM investments.
- B. **Changes in fair value** of HTM investments are **not relevant** to an investor who will hold to its maturity.
- C. If an investor has the “**positive intent and ability**” to hold to **maturity**, investments in debt securities are reported at **amortized cost** on the B/S.
 - All investment securities are **initially recorded at cost**, and **adjusted by unamortized discount/premium**:
⇒ **Amortized cost** = Face value (− unamortized Discount, **or +** unamortized Premium).

Example

On July 1, 2009, Ocean, Inc. purchased a bond for investment at **\$666,633 (cash price paid or PV for bond)** which will be held to maturity. The bond has a face (= par) value 票面值 of \$700,000, at stated interest rate (= **fixed coupon rate 票息率**) of **12%** bonds. **Interest** is payable **semi-annually** (**\$42,000 = \$700,000 x 12% x ½**) on June 30 and December 31. The bonds mature in **three years (maturity date)**. The **market yield** for bonds of similar risk and maturity is **14%** (**market interest rate, i.e. YTM**).

Note: If market interest rate (YTM: 14%) **>** coupon rate (12%) => buy at a “**Discount**”, which in effect an **additional revenue** (apart from cash interest revenue) to the co. **in future years**.

Vs. [If coupon rate (offer by bond) > market interest rate (requested by Mkt.) => “**Premium bond**”, which in effect an **additional expense** to the co. and will decrease interest income during future receipt of cash interest.]

Calculation of the “Bond Price”:

		Present Values	
Interest	\$42,000 x 4.76654 *	=	\$200,195
Principal (=par)	\$700,000 x 0.66634 **	=	466,438
Present value (price/value) of the bonds			\$666,633

* present value of an ordinary annuity of \$1: **n=6** (**paid semi-annually in 3 years**), **i=7%**

** present value of \$1: **n=6**, **i=7%** (**YTM/2**)

Ordinary annuity: paid/received at the **ending** of the period

Annuity due: paid/received at the **beginning** of the period

Required

Prepare journal entries for recording:

(i) the acquisition; and

(ii) the receipt of the first two interest incomes.

(iii) What are the items and amounts to be reported on the statement of financial position as at December 31, 2010?

i) Purchase recording: July 1, 2009

(1) Investment in bonds (Face value).....	700,000	
=> Discount on bond investment (Diff./Bal. fig. - contra investment A/C)		33,367
(2) Cash (price calculated above).....		666,633

ii) Recording Interest (use effective interest method: interest is recorded each period as the *effective market rate of interest* (YTM) multiplied by the *outstanding balance* of the investment)

Bond Amortization Table

*Outstanding Balance	Cash Interest received	Effective Interest Revenue (i.e. Actual)	Increase in Balance
(3 years)	6% x 700,000 (= Face value)	YTM 7% x (*Outstanding Balance)	Discount Reduction/Amort.
	(2)	(1)	(1) - (2)
666,633	42,000	.07(666,633) = 46,664	4,664
671,297	42,000	.07(671,297) = 46,991	4,991
676,288	42,000	.07(676,288) = 47,340	5,340
681,628	42,000	.07(681,628) = 47,714	5,714
687,342	42,000	.07(687,342) = 48,114	6,114
693,456	42,000	.07(693,456) = 48,544	6,544 (rounded)
700,000	252,000	285,367	33,367 (Total discount)

*** Outstanding Balance = Beginning Bal. + Discount amortization => Ending Bal.**

December 31, 2009: Receipt of bond interest (use effective interest method)

(1) Cash (stated interest/coupon rate: 6% x face value).	42,000
=> Discount on bond investment (Bal. fig.- i.e. @ Amortized discount)	4,664
(2) Interest revenue - I/S (market rate 7% x *outstanding balance) (Cash int.+Dis. Amort.)	46,664

@Amortization of bond discount = Interest revenue – Cash (interest) received

June 30, 2010: Receipt of bond interest (if int. not yet rec'd at y.e.=> accrual for "Int. Receivable")

Cash (stated rate x face amount).....	42,000	(... as int. is an obligation to pay)
Discount on bond investment (Bal. fig.).....	4,991	
Interest revenue – I/S item (market rate 7% x *outstanding balance)		46,991

iii) December 31, 2010 (Statement of financial position- extract)

Investment in bonds (at cost/par/face value initially)	700,000
Less: Discount on bond investment (a contra A/C to reduce bond asset) (\$33,367 - 4,664 - 4,991 - 5,340) = \$18,372 unamortized discount)	(18,372)
Investment in bonds, NBV/Carrying amt./Outstanding bal. for bond interest computation (i.e. at "Amortized cost")	681,628 (up to \$700k at maturity date)

Recording Sale of HTM Investments (Due to IAS No. 39 sanctioned unforeseen circumstances)

January 15, 2010: (Sell all the bonds at \$725,000)

(1) Cash.....	725,000	1) Dr. cash
(3) Discount on bond investment (33,367 - 4,664)	28,703	3) w/o unamort. Dis.=>Realized gain
(2) Investment in Masterwear bonds	700,000	2) Remove Investment
=> Gain on sale of investments (Bal. Fig.= 25,000 + 28,703) 53,703 => (4) Gain/Loss		

Try must-do TQ. Exercise 12-1

Your turn

1. Form into groups of 5 to 6
2. Select one topic in your own discipline area
3. Demonstrate how to apply the PCK just learnt to enable/engage a “meaningful learning”

Your turn - designing a module curriculum

- List indicator(s) students have learned
- List what knowledge and skills about the topic that should have (i.e. **prerequisite knowledge**) in order to facilitate the effective learning.
- In a diagram (or **knowledge schema**), **show how the indicators of student learning are connected for the intended meaningful learning.**

Conclusion

- There is **no panacea for teaching**
 - Different or specific to different context
- **Key factor is ???**