Supporting Pedagogical Practices Through the Interactive Learning Network (ILN)

CITE Research Seminar
June 6, 2003

Alvin Kwan, Sandra Lee, Felix Siu & Sue Trinidad

Objectives

- To give an overview of the Interactive Learning Network (ILN)
- To share our experience of using ILN to support various pedagogical practices

Presentation overview

- Overview of ILN – Alvin (~15 minutes)
- Three pedagogical practices through the use of ILN (~45 minutes)
  - Felix
  - Sue
  - Sandra
- Conclusion – Sandra (~3 minutes)
- Q&A

ILN user types

- Administrator
  - Create communities, users; associate users to communities, etc.

- Teacher
  - Upload course material; create assignments, discussion forums, chat rooms, questionnaires and quizzes; examine students' access statistics, etc.

- Student
  - Download course materials; upload completed assignments; participate in discussion in chat rooms and discussion forum, etc.

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ILN community hierarchy
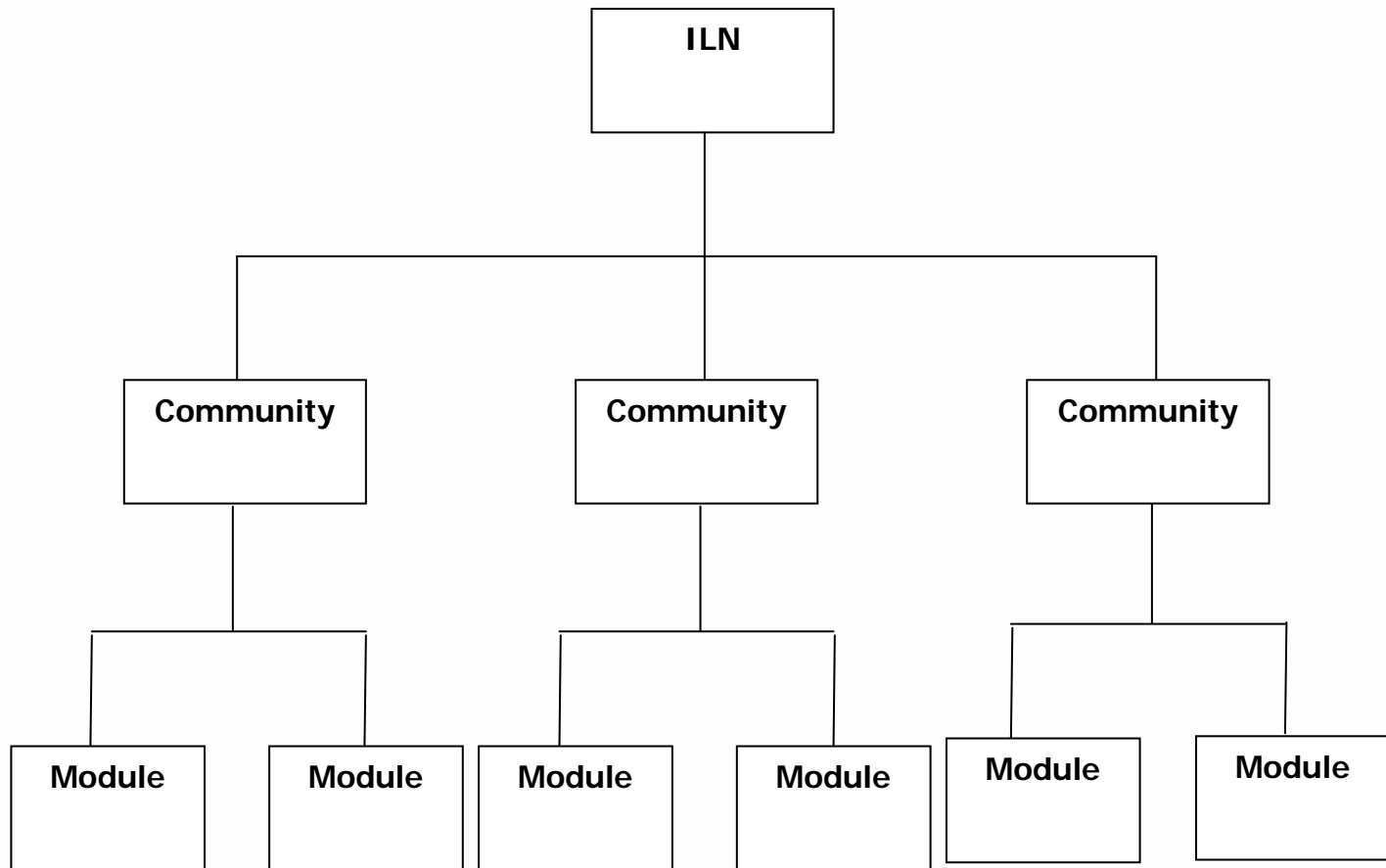
ILN users and communities

- A user may be allowed to access one or more communities
- Typical communities
  - Teaching programmes
  - Research projects
- A user may request to subscribe to other communities but it is the 'owners' of communities to decide whether to accept the request

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Let's see how the ideas are realised in ILN.

The IPPO project

The objectives of this study are to:

1. Identify the characteristics and motivation factors of full-time teachers undertaking part-time tertiary study.
2. Trial a range of innovative and flexible pedagogies in selected modules to determine their effect on academic performance and participation.
3. Compare the efficacy of flexible learning with traditional face-to-face instructional approaches
4. Determine other factors that influence learning progress
5. Design and pilot an instrument that will enable instructors to gain information on motivation and lifestyle factors
6. Provide preliminary data for monograph for return-to-study teachers.

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Felix, Sue and Sandra are going to share with you their experiences in using to support various pedagogical practices.

BITE 0008

Educational Enquiry and Assessment

Felix Siu

Year 2 (ITE &LIS) and Year 1 (LIS)

Description of the module BITE0008 (Educational Enquiry & Assessment)

- The course helps teachers to design and conduct systematic studies and analyses of their effects on students.

- At the same time, the course will also discuss methods of assessing the abilities and the achievements of students.

- At the end of the course, students are expected to be able to, at least, understand educational research reports and to design educational assessment instruments.

Objectives

1. understand the role of measurement and assessment in the instructional process
2. classify different types of assessment.
3. define instructional goals and objectives in ways that facilitate the construction of appropriate tests and assessments.
4. understand the concepts of validity and reliability and their role in the construction, selection, interpretation, and use of tests and assessments.
5. interpret and use standardized tests.
6. design and construct classroom tests and assessments that measure a variety of learning outcomes, from simple to complex.
7. understand the nature and characteristic of educational inquiry.
8. understand the ethical issues in conducting educational inquiry.
9. master the basic skills in conducting educational inquiry.
10. read and understand educational inquiry reports.

Siu: Action research project

- includes the use of social-constructivist approaches to teaching and learning whilst encouraging lifelong learning practices in the module BITE0008 for class (Yr2A) and (Yr2B).

- The students in this module are provided with appropriate models (especially Task-based learning), scaffolding and support to further develop their lifelong learning skills assisting them to become more self-directed and self-reflective learners.

- The technology is used to support task-based learning and the assessment tasks drive the learning.

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Specifically, through BITE0008(Yr2A) and (Yr2B) module I am attempting to:-

➢ support part-time students through independent learning methods

➢ support a range of learning styles

➢ encourage students to be actively engaged with the subject matter to adopt a deeper approach to learning

➢ encourage collaboration and higher order thinking skills provide rapid feedback through sharing/group work in Task-based learning

➢ encourage students to monitor their own progress and self-directed learning through the completion of a learning journal/log book

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Achieved by providing a teaching and learning environment that has:

➢ authentic tasks, projects or investigations

➢ peer-reviewed forms of presentations

➢ reflections

➢ group sharing

➢ interviewing, interpreting and applying research findings

➢ case studies and real-world practice.

➢ online reference material linked to support and encourage independent learning

➢ computer based instruction sheets (to guide students through procedures) providing both online and paper-based options for different learning styles.

Assessment tasks

➢ Group and Individual sharing tasks and journal

First session: Task

- Reflect on a specific lesson you have taught or would like to teach.

- Make a list of the decisions you made (or need to make) before, during, and after this lesson.

- Next to each decision, identify how you will obtain the information needed to make the decision.

    – What criterion might you use to judge the quality of each piece of information?

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Second session: Task 1

➢ Design an assessment which is:
  - ➢ Reliable not valid
  - ➢ Valid not reliable
  - ➢ Neither reliable nor valid
  - ➢ Both reliable and valid

➢ Each item should include the following elements:
  - ➢ Level of target students
  - ➢ Purpose of assessment
  - ➢ Form of assessment
  - ➢ Description of the task

Second session: Task 2

- Discuss the application of the "action options" in Hong Kong. What are the difficulties and challenges in implementing such action options?

Second session: Task 3

➢ In view of the seven principles, design a portfolio assessment task, which includes the following elements:

   ➢ Level of target students

   ➢ Purpose of assessment

   ➢ Description of the task

Second session: Task 4

➢Review test on writing MC items

Third session: Task

➢ Read the abstracts of some dissertation from the web site of the MSc Alumni on http://www.cite.hku.hk/alumni/dissertation/default.htm, then discuss what type of research do they belong to.

Fourth session: Task 1
(Class conducted in Computer lab)

- ➢ What are the differences between journals and books in terms of their call numbers in the HKU Library catalogue?
  - ➢ Find an example for encyclopaedia, dictionary, thesaurus, handbook, and citation index in the area of education or IT in education
- ➢ Deciding Whether to Read All or Part of a Source
- ➢ Evaluating an article
- ➢ Evaluating a book

Fourth session: Task 2

➢ Suppose we are going to conduct a study on "Teaching and Learning Mathematics with IT"

➢ Find an example of a journal article relevant to the study

  ➢ Evaluate the article

Fourth session: Task 3

➤ Select a research topic

 ➤ Find 8 relevant references from Internet search, Library catalogue, Proquest Direct, and ERIC (2 from each type)

Fifth session: Task 1

➢Group Presentation
➢Peer evaluation

Q16) What about the task-based learning in Felix Siu's module?

A eight students said the task-based learning was a good experience.

> *"It's absolutely good, because the classmates discuss with respect to a task, different strategies or solutions may come out. It's also good that we can share among our classmates. He includes plenty of group sharing and group work."*

> *"I think it should be task-based learning. Through the practice we can know how to apply the theory. I like this kind of learning."*

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BITE1111
Staff Development and School Change

Yr 3 (ITE)

21st January to 27th March

Thought for Today

If the 18th century is characterized as the **Age of Reason**, the 19th as **one of industry** and, the 20th century as **an era of profound scientific and technological revolutions**, then the 21st century could well be known as an **Age of Learning**. This will be a time when more people everywhere are involved in acquiring new knowledge and skills continuously throughout their lives and from virtually every context of daily life.

Source:http://www.usg.edu/admin/policies/tech_principles.html

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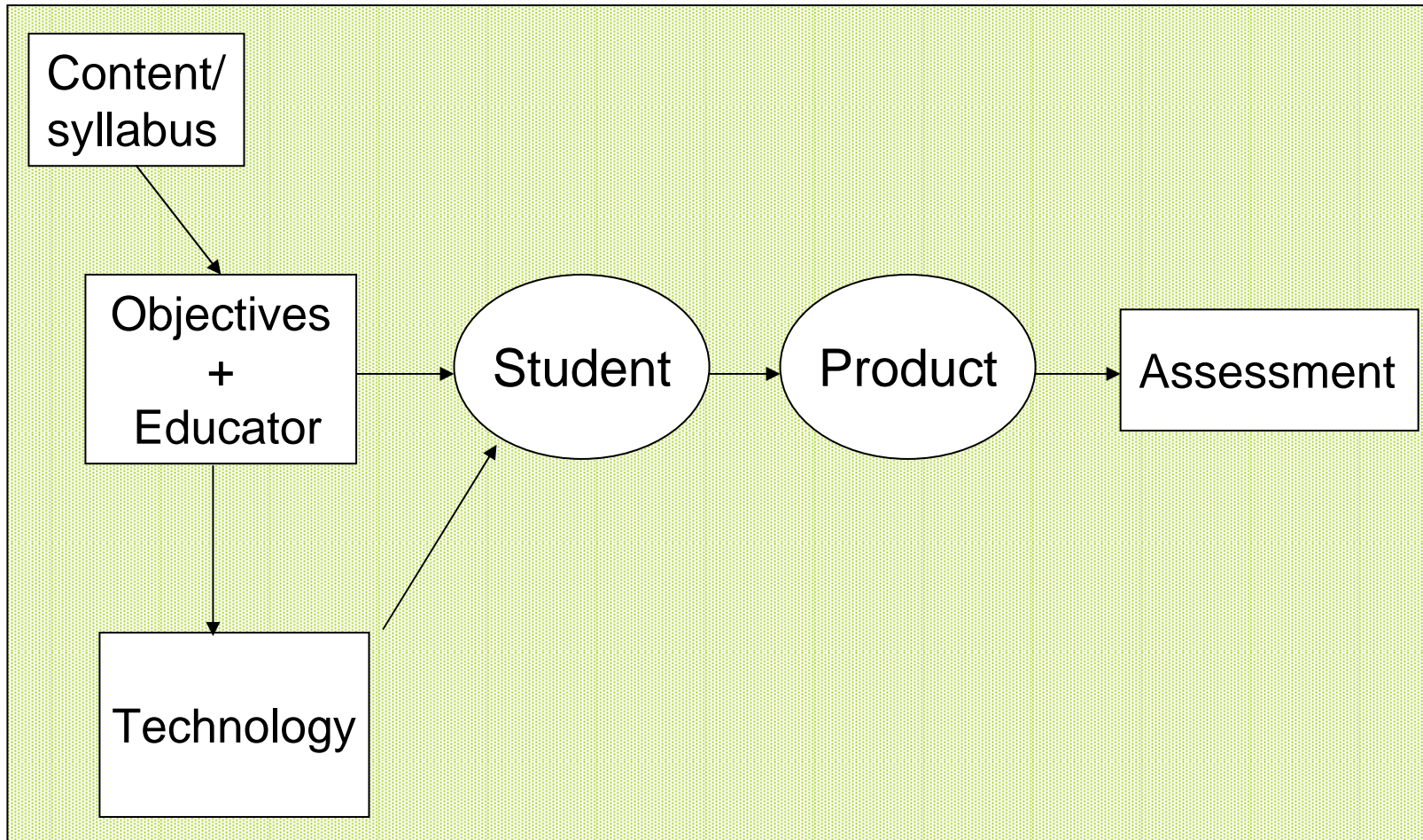Centre for Information Technology in School and Teacher Education

BITE1111 - Approach

• For this module a social-constructivist approach to teaching and learning was used to encourage lifelong learning, where students were provided with appropriate models (especially the *Mediated Learning Approach –MLA*), scaffolding and support to further develop their lifelong learning skills assisting students to become more self-directed and self-reflective learners.

• The technology was used to support MLA with the focus that the "assessment tasks drive the learning". The practices included the use of ILN to build a

–community of learners with two online sessions using synchronous and asynchronous communications via ILN,

–access to structured online materials and resources,

–the use of group-collaborative classroom tasks, and the completion of a learning journal *Journal of Andragogy* to help students reflect on their own learning during the modules.

References

Albon, R. & Trinidad, S. (2002). Building learning communities through technology. In K. Appleton, C. Macpherson, & D. Orr (Eds.), *International Lifelong Learning Conference: Refereed papers from the 2nd International Lifelong Learning Conference*, (pp. 50-56) Yeppoon, Central Queensland, Australia.

•Trinidad, S. & Albon, R. (2003). *Using the potential of technology to reconceptualise assessment.* Victoria, Australia: Common Ground Publishing.

Teacher-Directed Learning Environment

Content/ syllabus

Objectives + Educator

Technology

Student

Product

Assessment

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The Learning Community

UNIVERSITY
- Lecturer expertise

PEERS
- variety/degrees of knowledge

TECHNOLGY
- email
- WWW- resources, lists, chat groups
- ILN, WEBCT etc
- Databases
- Network/organisations

SCHOOLS
- Reciprocity schools & university
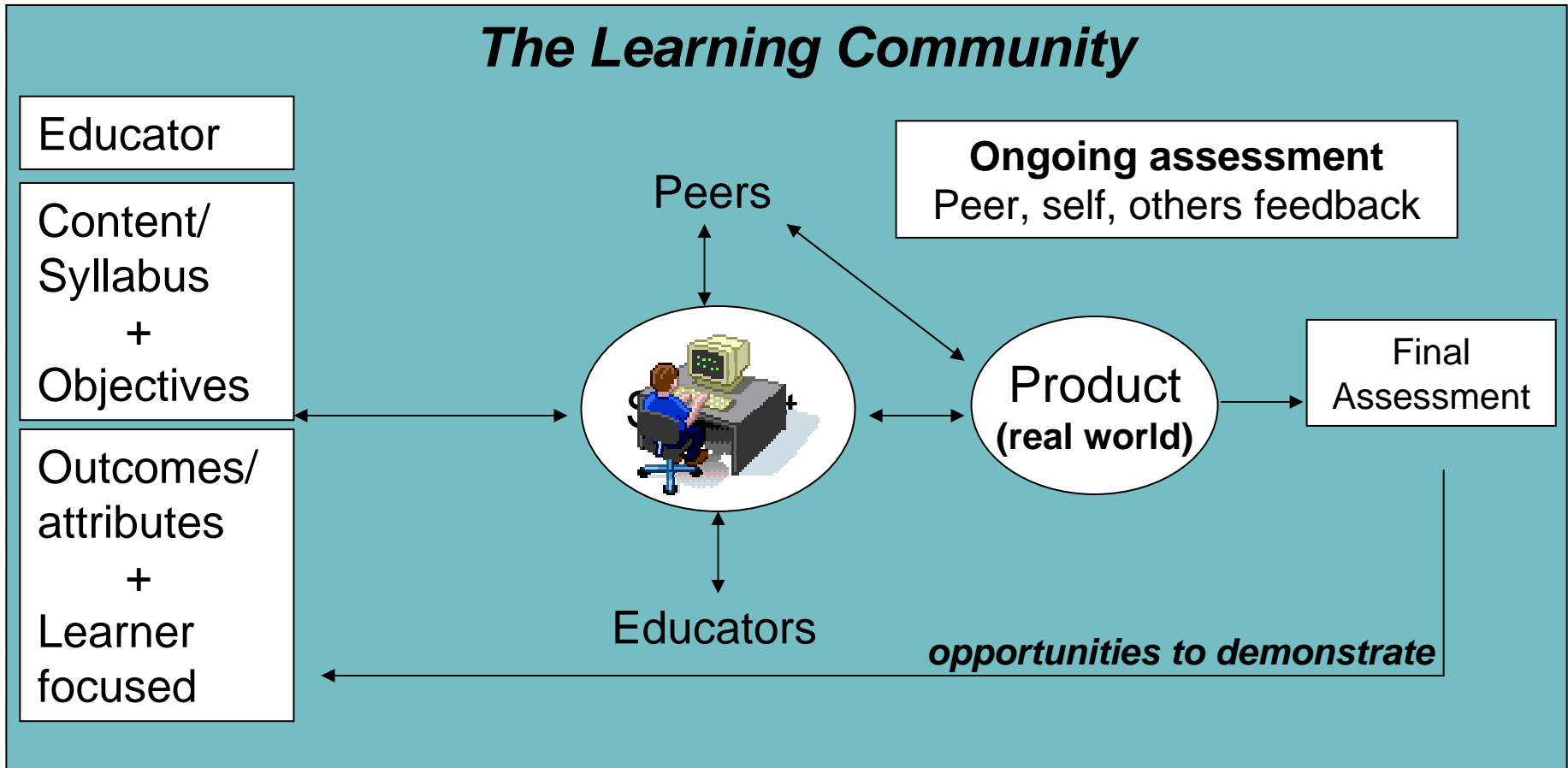
FAMILIES
- support and encouragement

LIBRARIES
- information
- electronic services
- databases

Technology *drives* the model, assessment *drives* the learning

The Mediated Learner Approach (MLA)

The Learning Community

Educator

Content/ Syllabus + Objectives

Outcomes/ attributes + Learner focused

Peers

Ongoing assessment
Peer, self, others feedback

Product
(real world)

Final
Assessment

Educators

opportunities to demonstrate

© *Albon &Trinidad, 2001*

Linking Learning and Assessment
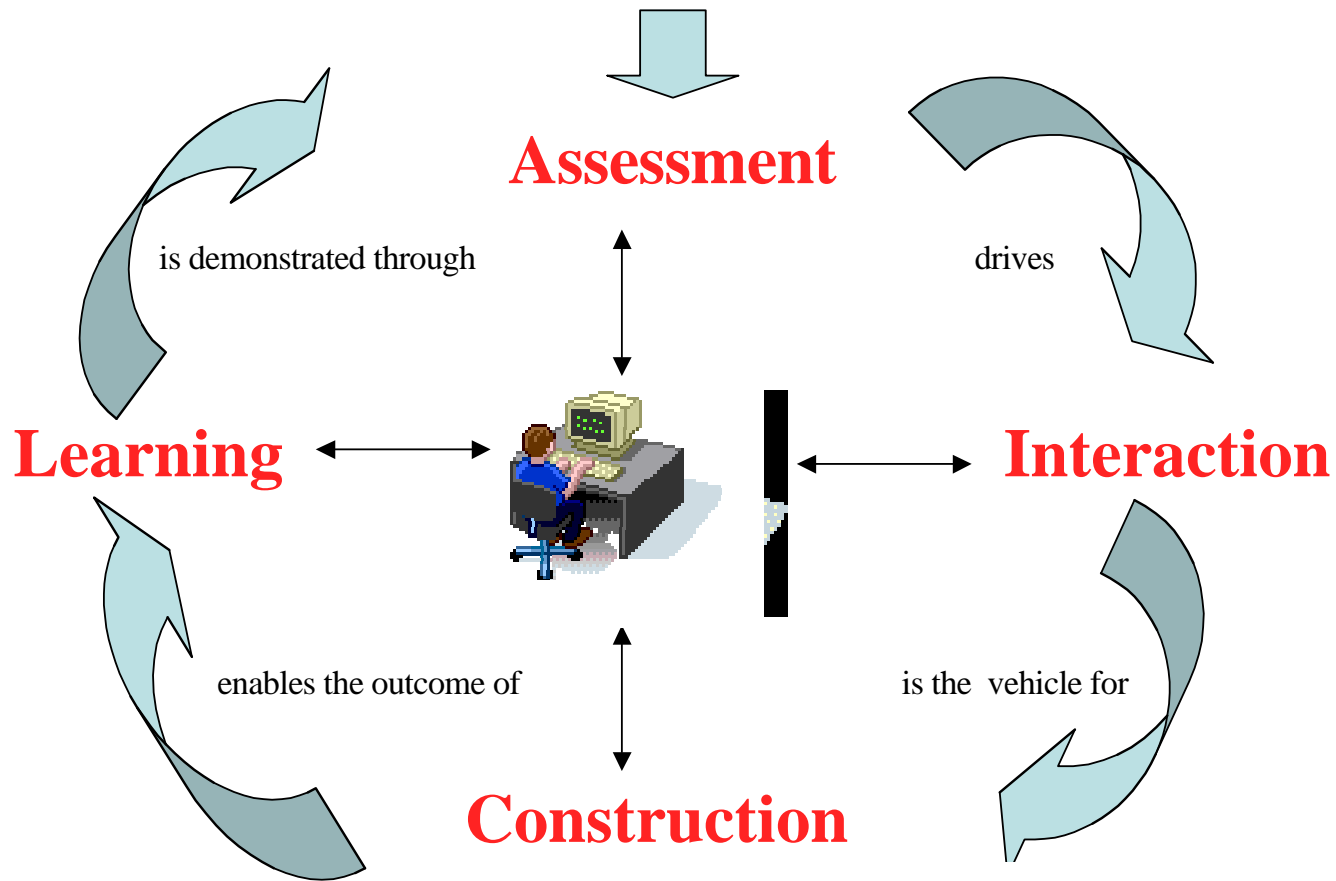
Syllabus Outline

- The course discusses theoretical and practical issues in teacher professional development and school development for technology integration.

- Topics include the concept of staff development, models of teacher professional development in information technology, teacher evaluation and instructional improvement, change of staff culture, and integration of educational practice and school development plan.

- This module also aims to introduce the skills and strategies in promoting an IT culture at school, the implementation of staff development plan and the provision of internal and external IT support in the school context.

Objectives

Objectives:

Synthesize, analyze and evaluate current theoretical and practical issues in the area of teacher professional development, and school development for technology integration.

Assess different PD models and plan a staff development module based on research.

Identify and discuss management issues pertaining to school development and change.

Develop strategies to become lifelong learners who can become change agents in learning environments.

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Sessions

1. Schools as learning organizations
2. Staff development and change
3. Teacher evaluation and instructional improvement in Hong Kong
4. Teacher evaluation and instructional improvement PD Models
5. What is your school like? -Online session
6. What is your school like? –Group Presentations
7. Technology Planning in Schools
8. Staff Development and School Change Issues
9. Staff Development and School Change Directions - Online session
10. Conclusion and sharing of journals/learnings/findings

Assessment Tasks

Assessment Task 1: Group & Individual Task (groups of 4)   40%

Part 1:   What strategies does your school have in place to encourage staff development and school change?

*   Each **individual within the group of four** is to gather data from your own school to present the current situation of the school. Each individual's school data will be combined into a group table to compare and contrast four Hong Kong schools current situation.

*   You are to gather data on school staff computer competency levels and give an account of what professional development has been conducted at your school.   Have the Hong Kong Education Department surveys been completed? The school data will be compiled into the **group table** showing the picture of four Hong Kong schools. The composition of the table is negotiable but possible formats will be discussed in class. Then the group must compare and contrast this data to answer the questions "***What strategies does your school have in place to encourage staff development and school change?***" Each group's effort will be judged on participation in the group and the team's ability to gather, synthesise, analyse and evaluate information to form an accurate picture of the current situation. This will assist you in developing part 2 of the assessment task.

*   ***Due Session 6 for class presentation and discussion with peers***

Assessment Tasks

Assessment Task 1: Individual Task   40%

- ***Part 2: What professional development plan will you develop for your school to encourage staff development and school change?***

- Each individual is to devise a plan the school that they might follow to assist in professional development and school change. This plan will be based on the data gathered in part 1. Format is negotiable but must build on part 1 of the assessment task 1 and show evidence of readings and research in the area of staff development and school change.

Assessment Tasks

Assessment Task 2: Individual Task   20%

- As a lifelong learner in the information age it is important to construct and reflect on your own knowledge. The development of a reflective journal, or a "*Journal of Andragogy*" allows you, as an adult learner, to further develop your ideas and reflect on your own learning. Format of this journal is negotiable but needs to be discussed with the lecturers. For example this journal may include a week-by-week account/collection of what you have had to do, read, learn, investigate or explore, and relate to relevant findings and developments over the course. Such a journal will be judged on the metacognitive content, that is, thinking about your own learning and being able to reflect on your own learning which has enabled you to learn things better, and to construct your own knowledge.

- Your reflection may be classed as "mere regurgitation", "some thought" or "reflective application". Ultimately your "*Journal of Andragogy*" will show development over time with thoughtful reflection of developments and discoveries of how you as a teacher will use distributed collaborative learning systems in your classroom to enhance teaching and learning. Journals will be discussed weekly in class using the KWL model. The journal is ongoing from the beginning of the course and is to include a summary document of the ten most significant learnings you have undertaken in this course to help you construct your own knowledge and understandings about the topic. The ten most important learnings are to be discussed at the final session, session 10.

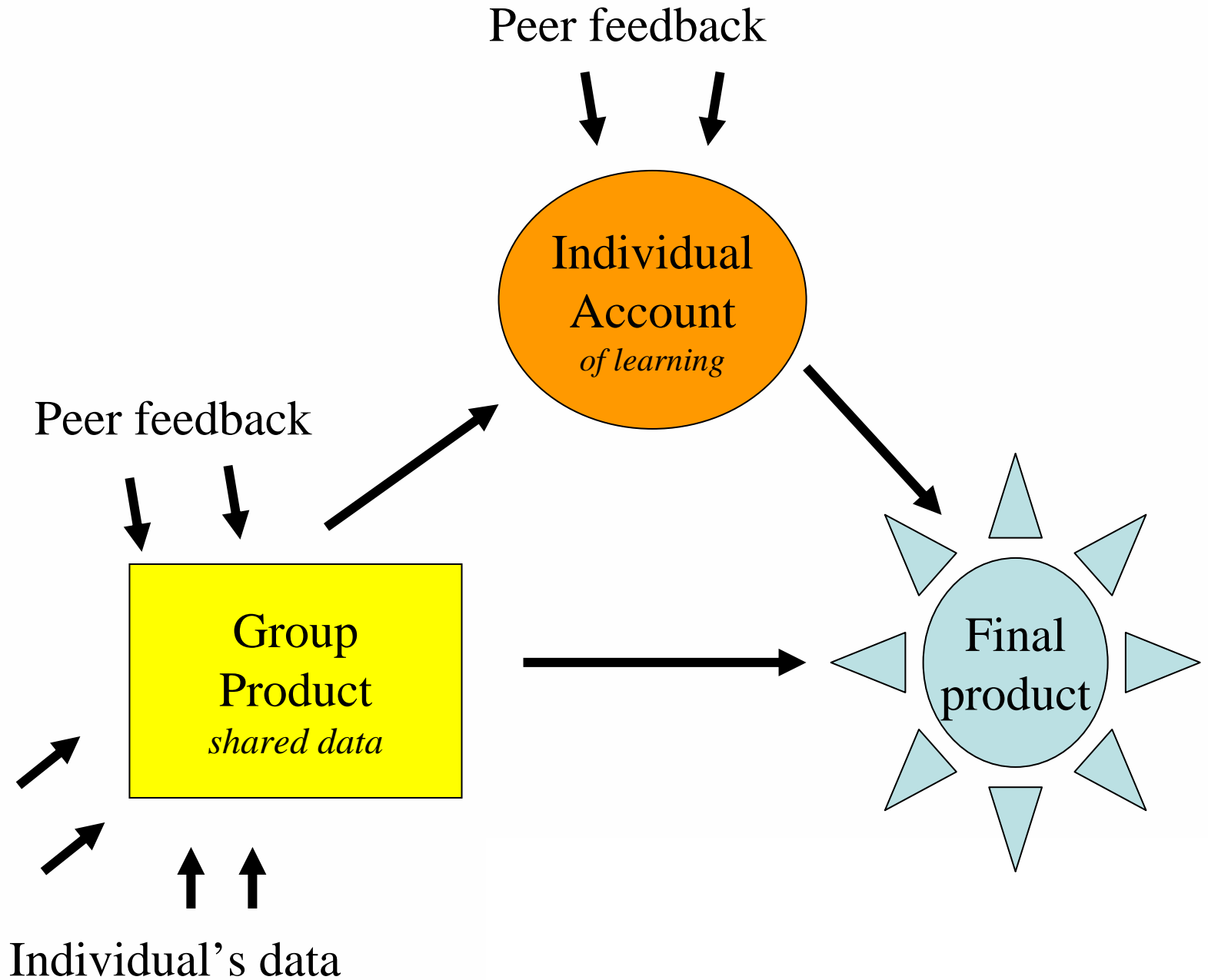# Staff Development and School Change

✍ What do you KNOW?

✍ WHAT would you like to know?

Document this in your learning journal

Peer feedback

Individual Account
of learning

Peer feedback

Group Product
shared data

Individual's data

Final product

Go to ILN – BITE1111A

BITE 1101/BLIS 1005 Information Literacy

Year 1 (LIS) and Year 2 (ITE)

James Henri and Sandra Lee

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Description

This course provides a framework for an examination of information literacy issues. The central concerns are the nature of information, the nature of the autonomous learner, resource based learning, and the acquisition of such literacy through information skills. A number of approaches to facilitate information literacy will be explored.

Innovation

- Three classes were combined into one large class.
- Two days before the first lesson, classes were suspended due to health concerns over SARS.
- Instructors opted for online, flexible delivery for the entire module.

Created virtual class discussion

- Interaction was critical
- Needed to support peer discussion in a virtual environment among strangers
- ILN is well suited to this, via synchronous and asynchronous communication functions

No student left behind

- Instructors created groups to discuss a paper relating to information literacy
- Students could elect to meet and discuss face to face, over the phone, on the ILN forum or chat or via e-mail
- Technology and ILN supported many options

Privacy issues

Special group e-mail accounts were created so groups could make initial and continued contact.

Added features

- We have a highly supportive technical team
- Able to offer support quickly and extend functionality
- Chat rooms required tracking so students could save discussion for later compilation
- ILN areas for discussion groups created—communities within the community

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Further studies

- Students made ample use of electronic communication, especially the forum

- This is an ongoing research project that seeks to better understand the needs of part-time students and how the ILN can support teaching and learning.

Self-directed learning

- The literature indicates that self-directed learning requires opportunities for sharing amongst students but needs to be structured carefully and provide sufficient support to achieve outcomes (Li et al, 2000; Smith et al, 2000; Vogel et. al, 2002).

- Self-directed and collaborative learning is also central to this project and analysis of the use of the ILN in the Information Literacy module continues.

Go to ILN:
BITE 1101/BLIS 1005

Conclusion

Results from the IPPO research project have enabled instructors to make informed decisions about student workload and assessment and course delivery options.

The ILN has helped build environments in which students are able to construct knowledge to become life long learners.

ILN—Learner Management System

Supports scaffolding and learning for learners as demonstrated in the above social-constructivist approaches in lectures, computer labs and flexible online environments.

ILN supports students

Critical components of the part-time student's flexible learning repertoire supported by ILN:

- self-direction

- student autonomy

- motivation

- applying learning to real world situations

- sense of belonging and community
  » Trinidad et al (2003)

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References

Li, N. Lee, K. & Kember, D. (2000) Towards self direction in study methods: The ways in which new students learn to study part-time. *Distance Education, 21(1*), 6-28.

Smith, I. Choi, S.H. & Cairncross, S. (2000) Does online flexible learning fulfill students' need and expectations? Paper presented at ALT-C 2000 Programme. 11th-13th September IMIST, Manchester.

Trinidad, S., Kwan, A., Lee, S., Lai, M., Siu F., Henri, J. & Chieng, A. (2003) Are in-service teachers ready for learning through CMC? Paper to be presented at ICCE 2003, December 3-5, Hong Kong.

Vogel, D., Shroff, R., Lee, F., Kwok, S. & Combes, J. (2002). Student e-learning intrinsic motivation: A qualitative analysis. Paper presented at *PACIS2002 The Next e-What? for Business and Communities*, September 2-4, Tokyo, Japan.

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