

Supporting students' academic discourse development in sub-degree programmes: An adjunct LAC instructional model

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Research and Development Project
Dissemination Conference of SCOLAR

9 May 2019 (Thu)

2:50pm-3:30pm

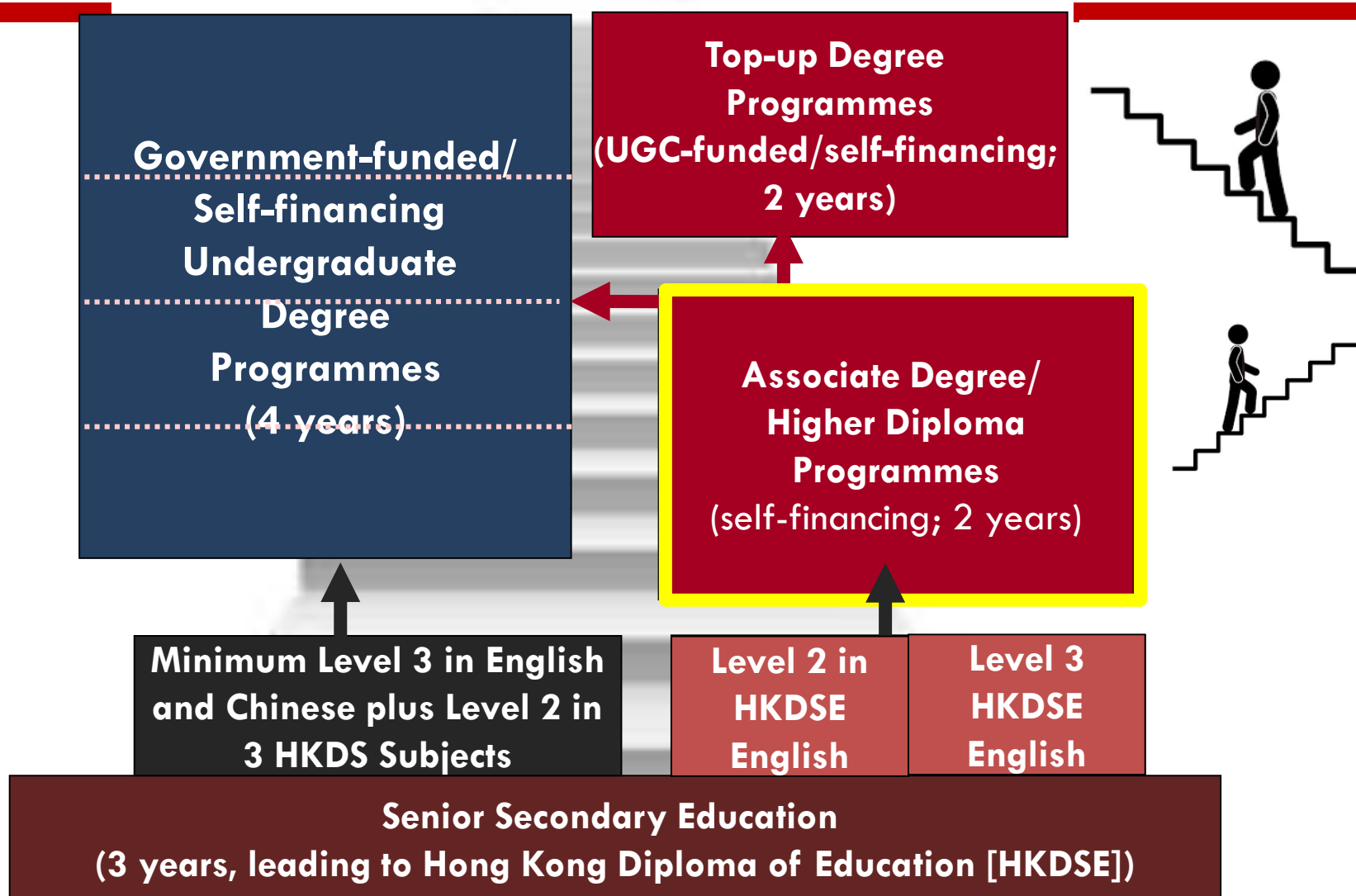
Conference Hall 04 (PS05)

Presentation Outline

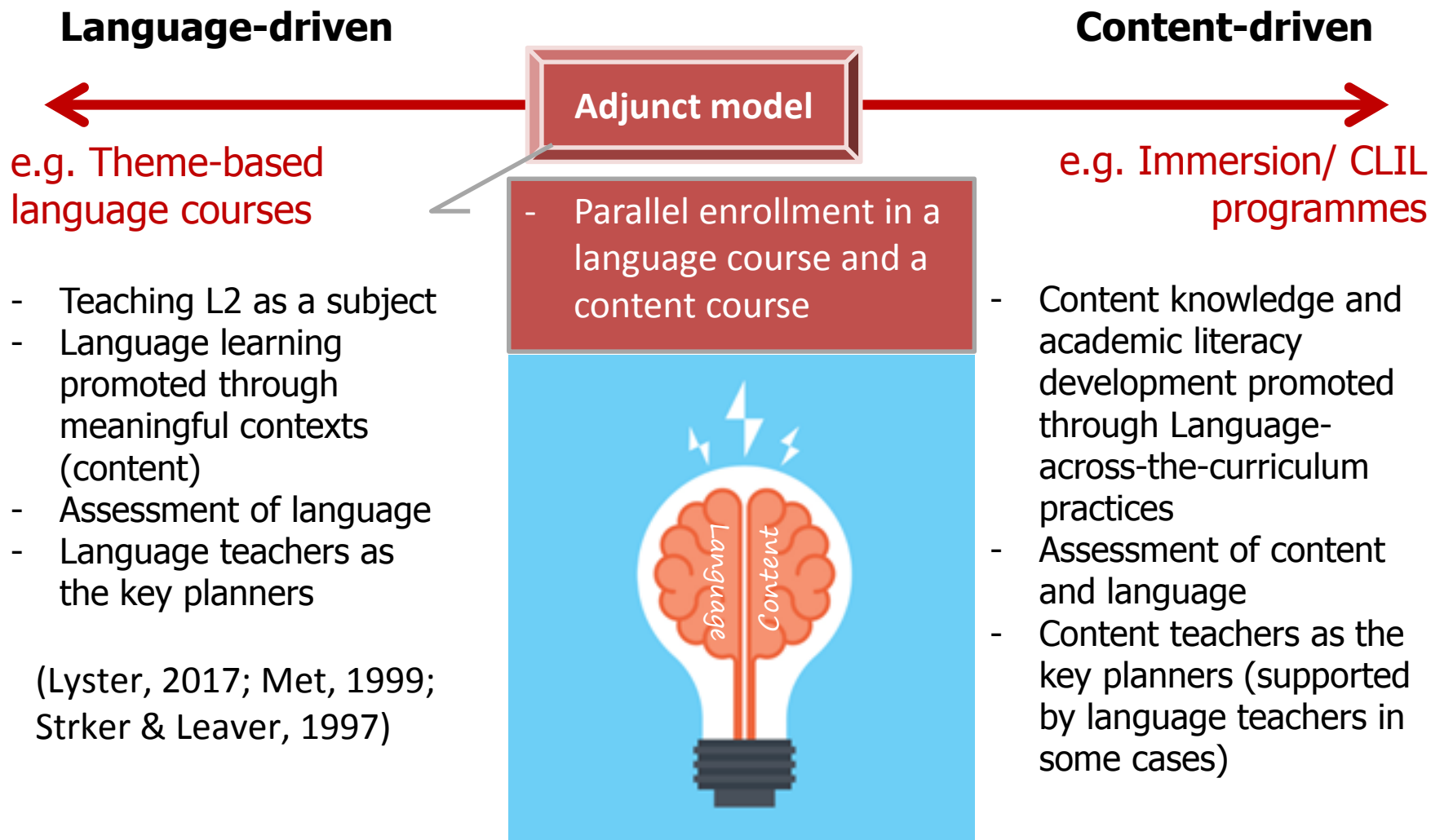


- Research Background & Design
- Phase One Findings: Students' and PLs' Voices
- Adjunct Course Design
 - Programme Intended English Language Learning Outcomes
 - Implementation of the Adjunct Model of Language Instructions
- Phase Two Findings: Effectiveness of the Model
- Pedagogical Implications and Key Recommendations
- Q&A

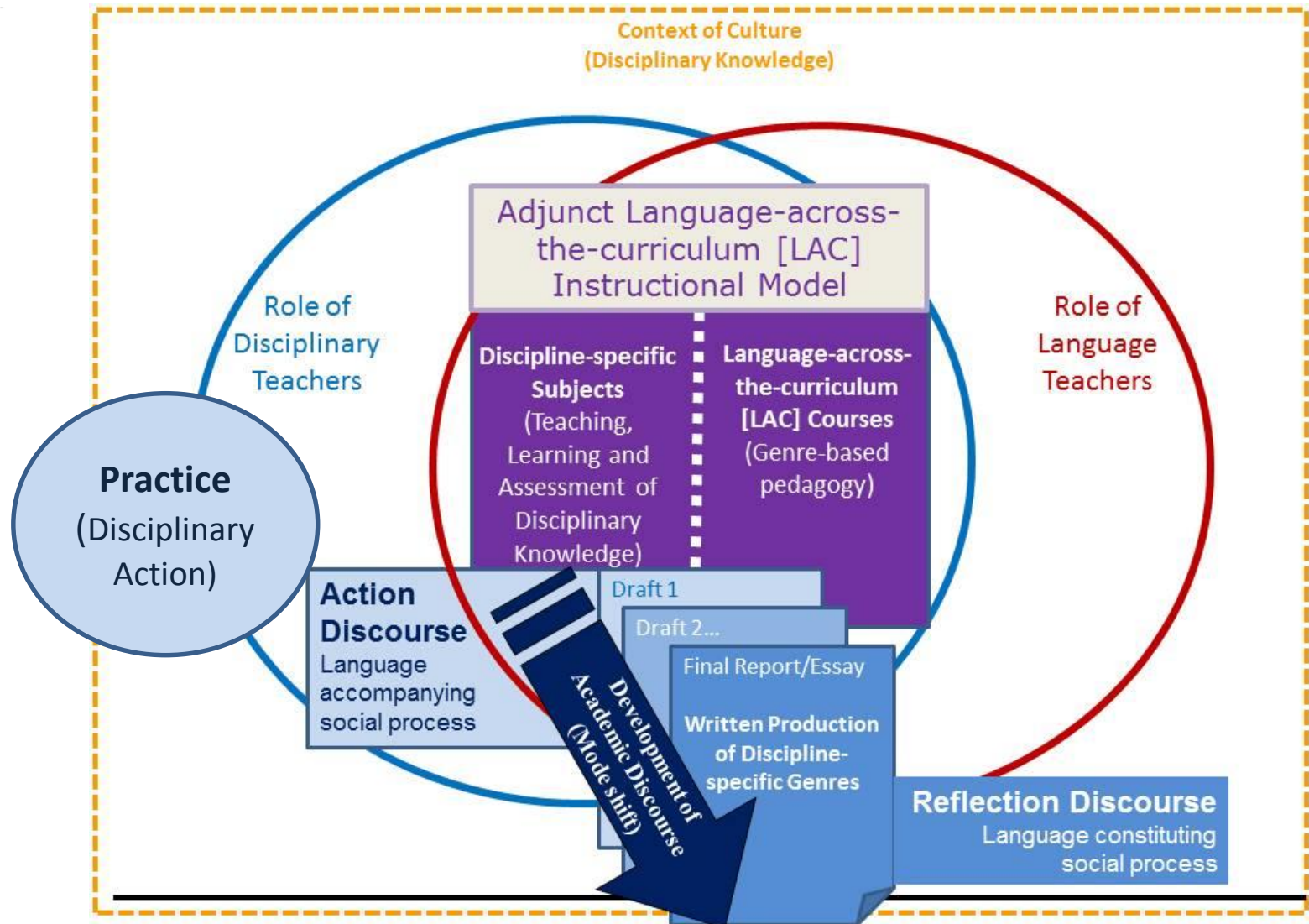
Alternative Routes for Getting an Undergraduate Degree in Hong Kong



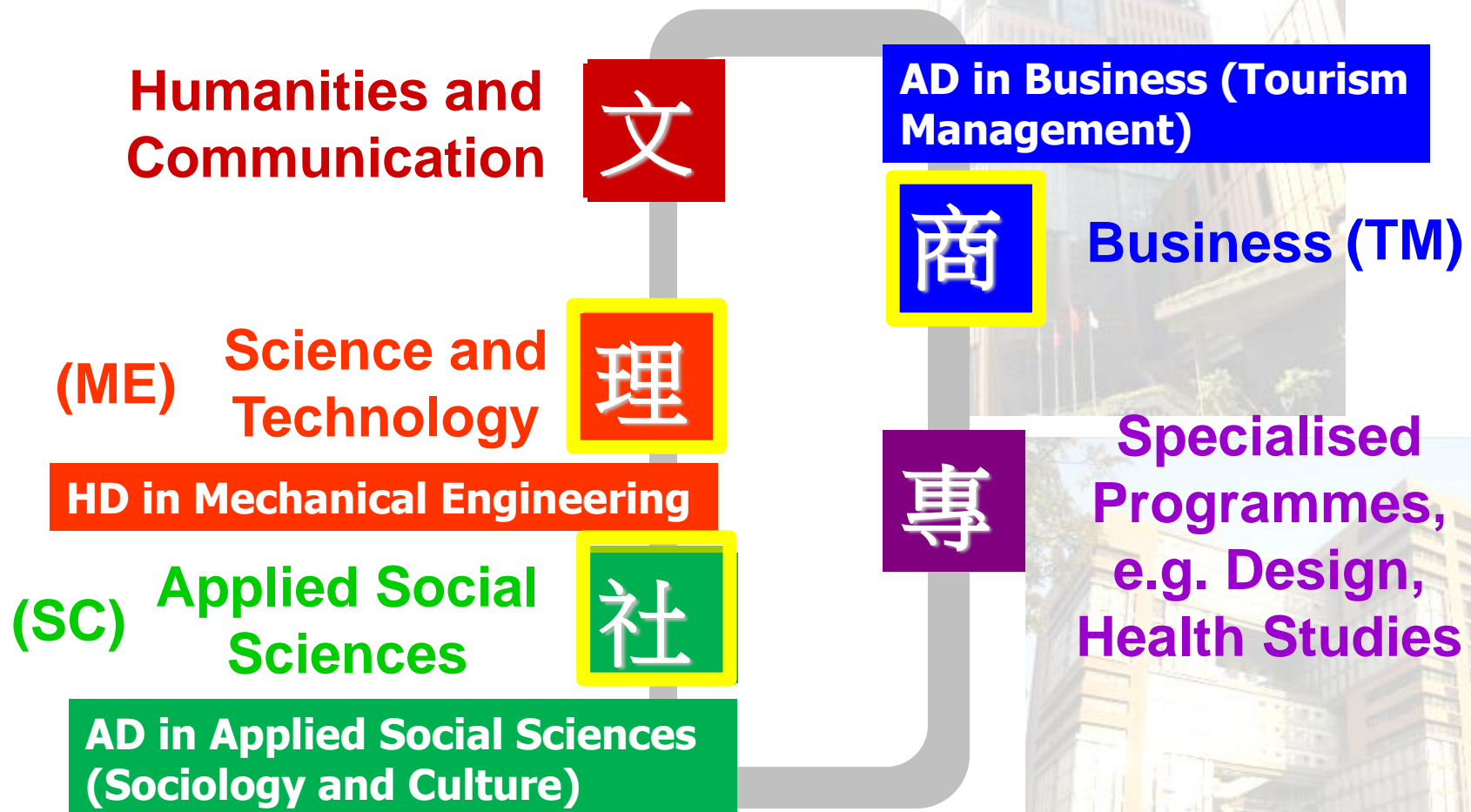
The Adjunct Instruction Model



The adjunct language-across-the-curriculum instructional model



Bridging Discourses across the Curriculum



Research Design



Phase One

(Feb 2016 –
Jun 2016):

Needs
Analysis

Phase Two

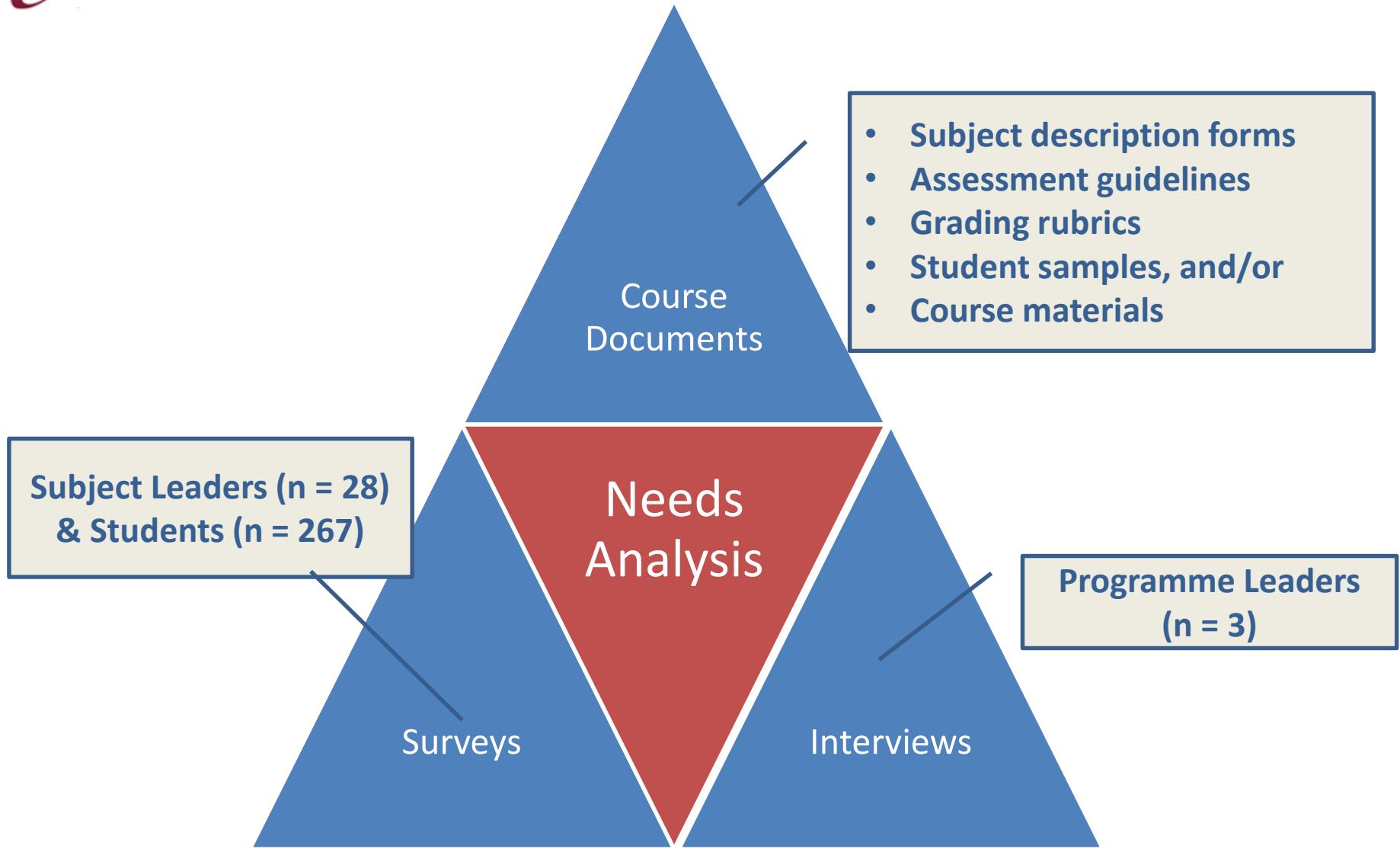
(Jul 2016 – Nov 2017):

Design and
Implementation of
the Adjunct Model

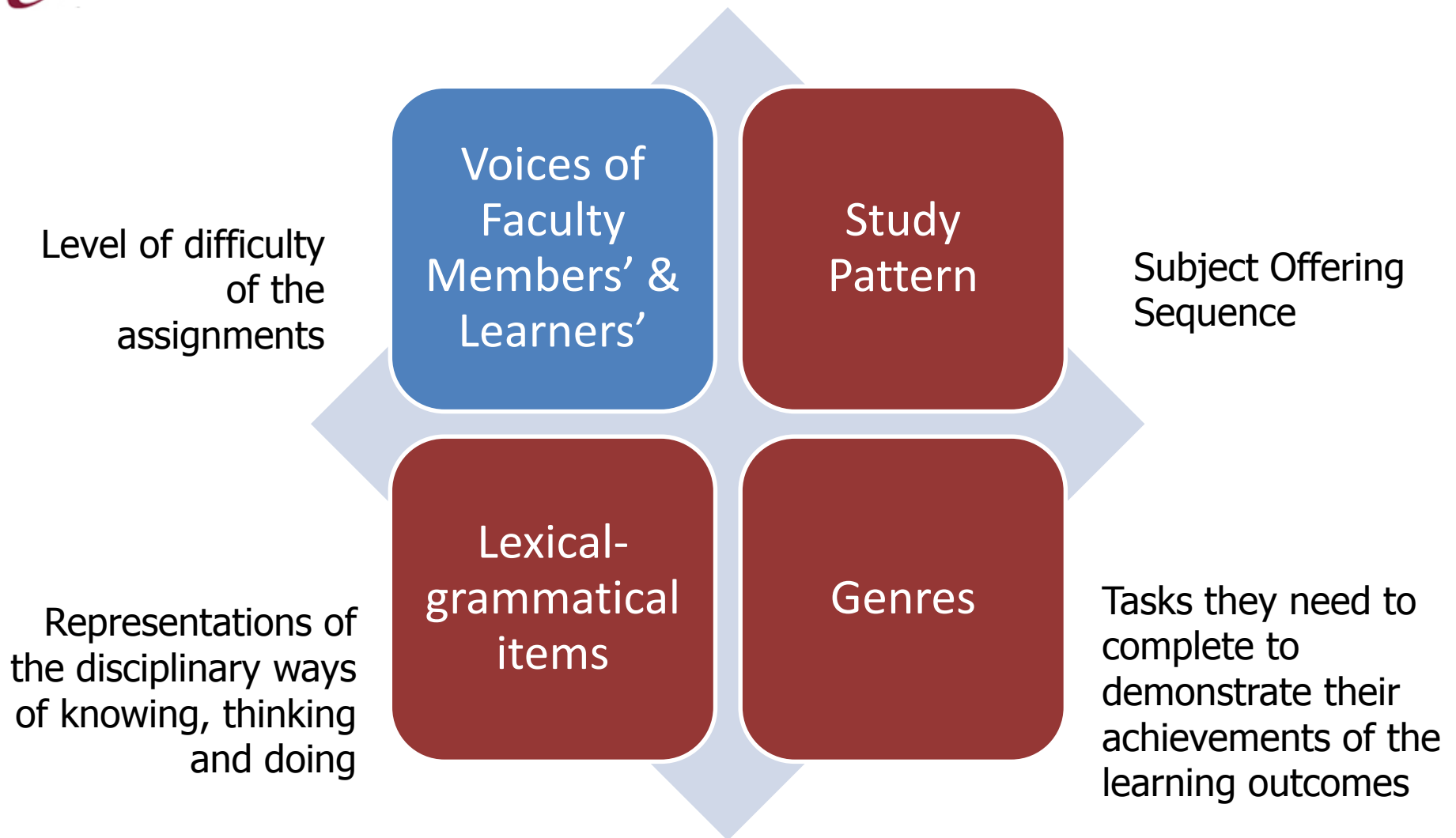
Phase Three

(Jan 2017 – Jan 2018):
Analysis and Evaluation

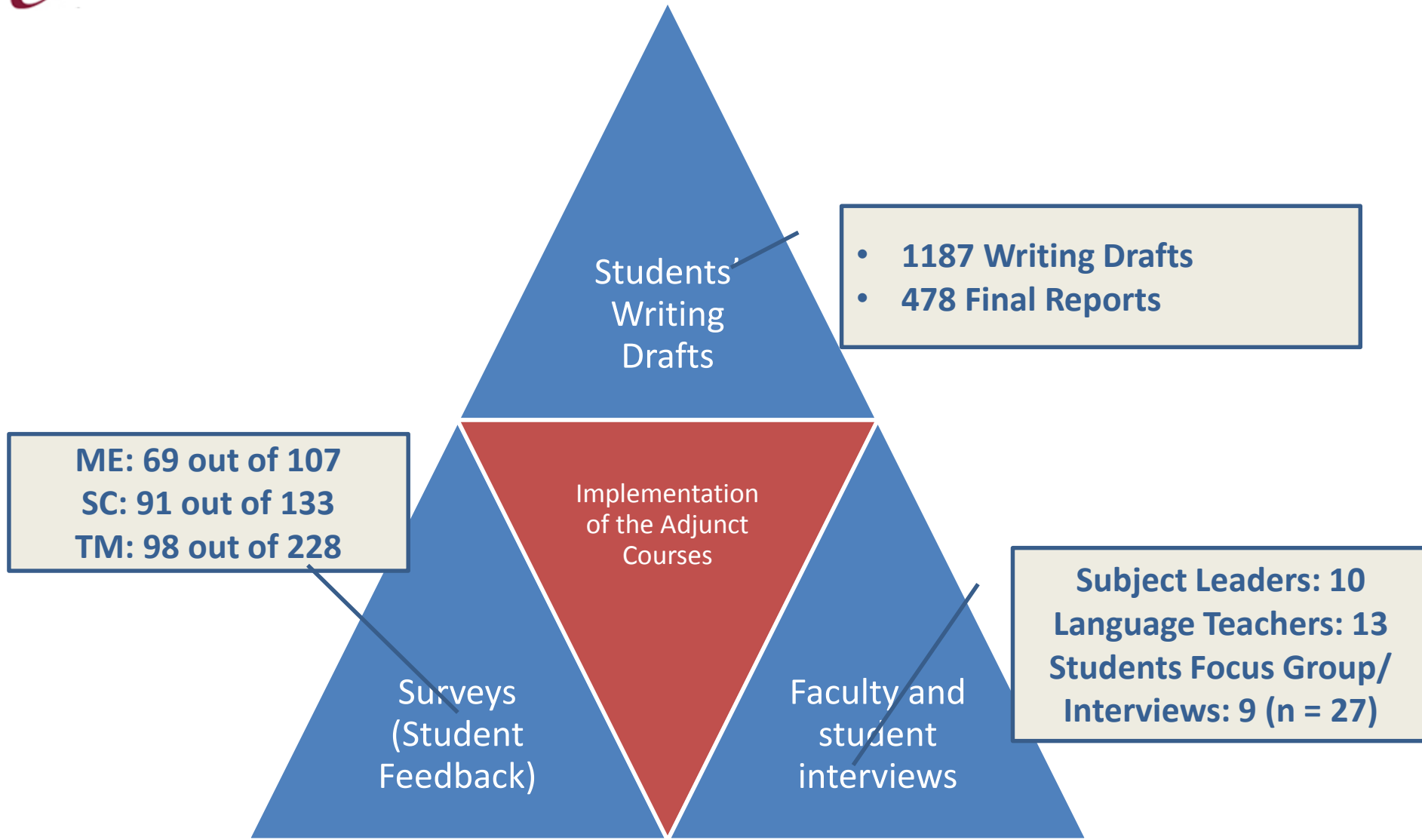
Data Sources (Phase 1)



Designing an Adjunct Model



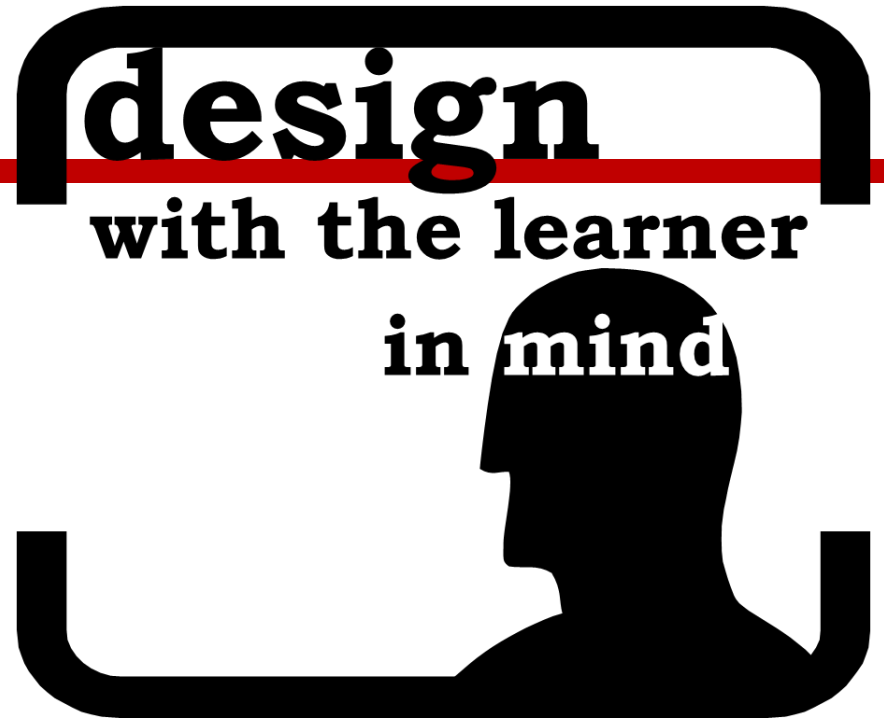
Data Sources (Phase 2)



Research Questions



1. What are specific English language demands of the target academic programmes in a community college in Hong Kong? (**Learning Needs**)
2. How does the adjunct language-across-the-curriculum instructional model **support sub-degree students' academic discourse development** in these English-medium academic programmes? (**Course Design**)
3. To what extent is the adjunct language-across-the-curriculum instructional model effective in aiding students' development of academic discourse in the target sub-degree programmes? (**Course Effectiveness**)



Phase 1 Data (Needs analysis)

PHASE ONE FINDINGS: STUDENTS' & PLS' VOICES

Language Demands

Perceived challenging assignments in the programme

Bridging is needed for **cognitively demanding genres, mostly with extensive writing.**

most
challenging

ME

TM

SC

1

CCN2248 Engineering Design Fundamentals
(**Engineering Design Report**)

CCN1007 Information Technology for Business
(**Business Proposal**)

CCN2196 Sociology of Culture (**Project Presentation – Literature Review with Findings**)

2

CCN2245 Applied Computing for Engineers
(**Engineering Proposal**)

CCN1103 Introduction to Tourism (**Written Itinerary Plan**)

CCN2196 Sociology of Culture (**Term Paper – Literature Review**)

3

CCN2249 Engineering Materials (**Engineering Lab Report**)

CCN2002 Introduction to Economics (**Demand and Supply analysis**)

CCN1018 Introduction to Sociology (**Seminar Presentation**)

Language Demands

Perceived challenges in using discipline-specific English

Bridging is needed for **discipline specific English language demands.**

most
challenging

ME

TM

SC

1

I can **understand** the
discipline-specific
vocabulary / terminologies

I can **use** the **discipline-**
specific vocabulary /
terminologies

I can **understand** the
discipline-specific
vocabulary /
terminologies

2

I can **understand** all
assessment materials in
English

I can **communicate** with
others **in English** for
improving my understanding
of the subject content

I can **answer** mid-term
test and/or examination
questions in English
within the time allowed

3

I can **communicate** with
others **in English** for
improving my understanding
of the subject content

I can **understand** the
discipline-specific
vocabulary / terminologies

I can **understand** all
assessment materials
in English

Programme Leader's Voice



Lack of higher-order thinking

- *The students' performance is generally alright, is **"too descriptive"** (very little argument, evaluation and explanation).*
- *Recalling a situation in Attractions Management, students are required to perform a SWOT analysis and explain their ideas. However, the issue was when completing such an assignment, a student chose Chi Lin Nunnery as a case but **could not explain** his or her option.*

Programme Leader's Voice



Poor organization skills

- *The texts they (students) write, if you have looked at the samples I gave you, the C and B samples are weak. They are relatively fragmented without much structure. The cited information and the quality of references are not that good and are not related. (They) do not quite know how to organize things, so **in terms of writing, they can't write a structured paper to demonstrate their organization skills.***

Programme Leader's Voice



Challenges in the use of multimodal resources

- *There is a subject called Project Management for Engineers and also Engineering Project. Those **involve reading texts**. After reading the texts, very often in Engineering, there is graph presentation. They need to **understand an object, how it works or the methods**. Those methods are accompanied by data or functions that need to be **represented using graphs**. This is typical in Engineering. They need to understand, have some concept about those (data).*



Language is **not only** about grammar
BUT
written/spoken/multimodal representation of
disciplinary **ways of knowing**
ways of thinking
ways of doing

Academic discourse is “**more than grammar** ... it is the ability to use language for cognition and analysis critical [to] one’s education progresses... imbued with cognitive as well as analytical processing, **competence in handling academic language is far more than the ‘skills’ of listening, speaking, reading, and writing.**”

(Weideman, 2018, pp.iv-v)



PROGRAMME INTENDED LEARNING OUTCOMES

e.g. ME

P-ILO-7 Communication: Communicate effectively in written and spoken English and Chinese.

Hidden learning outcomes



REFINED PROGRAMME INTENDED **ENGLISH LEARNING** OUTCOMES

Programme Intended English Language Learning Outcomes



Mapped Learning Areas	Programme Intended English Language Learning Outcomes
Writing genres in Engineering/ Sociology/ Tourism Management	Compose basic types of writing genres commonly used in the field.
Vocabulary, grammar, sentence structures, disciplinary ways of thinking and doing	Use appropriate lexical-grammatical resources to represent their disciplinary knowledge .
Discipline-specific conventions	Use conventions of the disciplines, e.g. documentation style.
Critical reading skills	Research, read and interpret findings/ analysis in texts and visual images.
Oral communication	Communicate disciplinary knowledge clearly in oral communication contexts .

Implementation the Adjunct Model of Language Instruction



The Adjunct Model

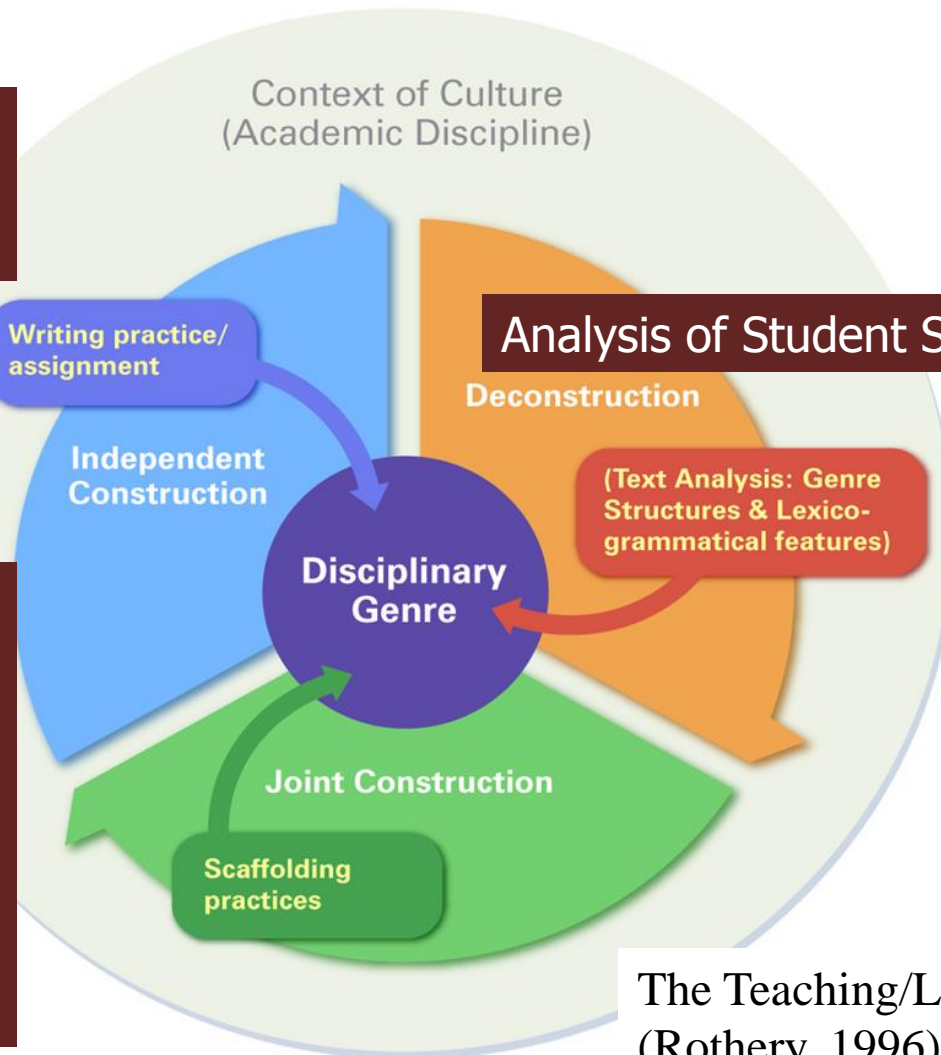


Genre-based Approach to Teaching



Feedback on Discipline-specific writing/presentations




- Genre-based language exercises (e.g. essay/report structure, grammar, discipline-specific vocabulary, etc.)
- Writing/ Presentation Practice



Analysis of Student Samples

The Teaching/Learning Cycle
(Rothery, 1996)

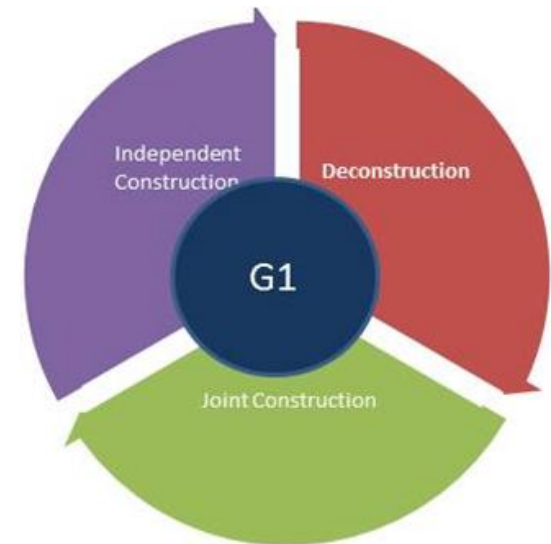
Application of Teaching/Learning Cycle in Engineering

2	<p>Elements of an proposal</p> <ul style="list-style-type: none"> ➤ Layout of a proposal ➤ Communicating Engineering thinking in a proposal ➤ Analysis of Engineering project proposal writing samples (Format and structure, citation format, etc.) ➤ Practice: Documentation exercises, text analysis <p>Deconstruction of text structure</p>
3	<p>Researching and reading texts and visual images in Engineering</p> <ul style="list-style-type: none"> ➤ Comprehension of terms essential in all fields of Engineering ➤ Reading and interpreting graphics ➤ Reading practice, oral/pronunciation practice <p>Deconstruction of multimodal resources</p>
<p>4</p> 	<p>Writing a proposal</p> <ul style="list-style-type: none"> ➤ Writing the Introduction of a proposal ➤ Sentence structures, grammar, useful expressions for writing problem statements and assumptions ➤ Writing practice
<p>5</p> 	<p>Writing a proposal</p> <ul style="list-style-type: none"> ➤ Writing the Methods and Findings of a proposal ➤ Methods (procedures, data collection, etc.) ➤ Sentence structures, grammar, useful expressions for writing procedures and work completed in Engineering projects, language for comparison, evaluation and budget analysis) Writing practice
<p>6</p> 	<p>Writing a proposal</p> <ul style="list-style-type: none"> ➤ Writing the Recommendation and Executive Summary of a proposal ➤ Sentence structures, grammar, useful expressions for justifying the choice ➤ Presenting ideas in graphics and corresponding texts ➤ Writing practice, oral practice

Application of Teaching and Learning Cycle in TM: Demand and Supply Analysis of a Case



- Introduction to Economics (**Demand and Supply analysis**)
- Requirements from the students
 - discipline knowledge
 - writing
- Students' perceived challenges of:
 - *using the discipline-specific vocabulary / terminologies*
 - *understanding the discipline-specific vocabulary / terminologies*
 - *communicating with others in English for improving my understanding of the subject content*



Unpacking the Demand of the Question



- “understanding the discipline-specific vocabulary/ terminologies”

Suppose you were going to graduate from your university. You considered whether you would apply for the Master of Business Administration (MBA) Program for your career development. It takes TWO years to complete the MBA program on full time.

(i) What was the marginal benefit of taking the MBA program?

(ii) Explain whether the receipt of job offer would affect your choice or not. What is your rational choice?

(New)
scenario

→ Marginal benefit + opportunity cost

(iii) Suppose the economy experienced a financial crisis when you applied for the MBA program. How did it affect your opportunity cost of taking the MBA program?

New
scenario

Unpacking the Demand of the Question

(i) What was the marginal benefit of taking the MBA program?

a) The marginal benefit is the benefit that arises from a one unit increase in an activity.

Direct definition

b) The marginal benefit of taking the MBA program was in terms of the “increment in the future salary after graduation”

Is this enough?

Applying theory

c) The marginal benefit of taking the MBA program was in terms of the “increment in the future salary after graduation” when compared with the current salary received by an undergraduate.

... It takes TWO years to complete the MBA program on full time.

Deconstruction

(ii) Explain whether the receipt of job offer would affect your choice or not. What is your rational choice?

If I receive a job offer, my opportunity cost of taking the MBA program will be the sum of money cost and time cost.

The total tuition fee paid for this 2-year master degree program refers to the money cost.

I will also forgo the opportunity to use the same period of time to get this job offer and earn income. Thus, the time cost should be measured by the income forgone.

- 1 In this case, if the marginal benefit is higher than the marginal cost of taking this MBA program, my rational choice is to take this program.
- 2 On the other hand, if the marginal benefit is less than the marginal cost of it, I should not take the MBA program. Instead, I should accept the job offer.
- 3 If the marginal benefit is the same as the marginal cost, I will be indifferent whether I take the MBA program or not.

Linguistic demand

Joint Construction

(iii) Suppose the economy experienced a financial crisis when you applied for the MBA program. How did it affect your opportunity cost of taking the MBA program?

- If there is a financial crisis, it will lower the chance of getting a job offer and the salaries will decrease in general. Thus, the time cost will drop, and the money cost will remain constant. The opportunity cost of taking the MBA program will drop.

Scenario

Linguistic demand

Cognitive demand
in the discipline

Independent Construction



- Exercises from
 - Workshop
 - Lecture and Tutorial
 - Study guide
- Assignment 1
- Mid-term short question
- Examination question

CCN0009 Tourism Management in English Session 5 (Demand and Supply Analysis, Con'd)		CCN 2002 Introduction to Economics 2016-17 Semester 1	
Suggested Approach	Suggested Solution	DV	
Market Demand: (1) Quote the given information, (2) identify the relevant factor affecting the market demand condition, and (3) how the market demand of this product is affected. What are the impacts on (4) the market demand curve, (5) the equilibrium price and (6) the equilibrium quantity of this product?	As the use of chemical fertilizers increases, the market demand of local organic agricultural products decreases. The market demand curve shifts leftward. Both equilibrium price and quantity decrease.	Market Demand: (1) Quote the given information, (2) identify the relevant factor affecting the market demand condition, and (3) how the market demand of this product is affected. What are the impacts on (4) the market demand curve, (5) the equilibrium price and (6) the equilibrium quantity of this product?	
Market Supply: (1) Quote the given information, (2) identify the relevant factor affecting the market supply condition, and (3) how the market supply of this product is affected. What are the impacts on (4) the market supply curve, (5) the equilibrium price and (6) the equilibrium quantity of a product?	At the same time, there are more and more Hong Kong people start the business of organic farming, there is an increase of sellers. The supply of local organic agricultural products increases. The supply curve shifts rightward. The equilibrium price decreases but the equilibrium quantity increases.	Market Supply: (1) Quote the given information, (2) identify the relevant factor affecting the market supply condition, and (3) how the market supply of this product is affected. What are the impacts on (4) the market supply curve, (5) the equilibrium price and (6) the equilibrium quantity of a product?	

Short and Long Questions:

(The solutions will be uploaded to the e-learning platform, MOODLE.)

- 1) You were planning to spend Saturday working at your part time job, but a friend asks you to go skiing. What is the true cost of going skiing? Now suppose you had been planning to spend the day studying at the library. What is the cost of going skiing in this case? Explain.
- 2) Different nations answer the what, how, and for whom questions differently. China, for instance, builds dams using many workers and only a little capital equipment. The United States builds dams using a few workers and a lot of capital equipment. Which economic questions are these two nations answering and why do the answers differ?
- 3) Discuss what is necessary to make rational decisions.

Student Sample from Independent Construction



Based on the above information, provide the simple demand and supply analysis of different possible effects on the equilibrium price and equilibrium quantity of local organic agricultural products with demand and supply diagrams.

At the same time, there are more and more Hong Kong people start the business of organic farming, there is **an increase** of sellers. The supply of local organic agricultural product **increase[s]**. The supply curve **shifts rightwards**. The equilibrium quantity **increase[s]**.

At the same time, there are more and more Hong Kong people start the business of organic farming, there is an increase of sellers. The supply of local organic agricultural product increase. The supply curve shifts rightward. The equilibrium price decrease but the equilibrium quantity increase.

Scenario

**Cognitive demand
in the discipline**

**Linguistic
demand**



Phase 2 Data (Effectiveness of the Adjunct Model)

PHASE TWO FINDINGS: STUDENT AND LECTURER FEEDBACK



Student Feedback (SFQ)

	ME N=23	TM N=21	SC N=30
Overall, this workshop can support my English language needs in the Mechanical Engineering / Tourism Management / Sociology and Culture programme.	4.35/5	4.14/5	4.00/5

Student Feedback (SFQ)



Question	ME Sem 1 N=44	ME Sem 2 N=23	TM Sem 1 N=71	TM Sem 2 N=21	SC Sem 1 N=55	SC Sem 2 N=30	Overall N=244
This subject is useful to my current/future study.	4.07/5	4.09/5	3.85/5	4.10/5	3.62/5	3.97/5	3.95/5
This subject teaches me something I will not normally learn in the formal curriculum.	3.95/5	4.05/5	3.79/5	4.24/5	3.59/5	3.83/5	3.91/5
This subject helps develop my English language skills.	3.91/5	4.00/5	3.96/5	4.33/5	3.55/5	3.77/5	3.92/5
I was given useful comments/feedback on my work for improvement.	3.93/5	4.41/5	3.89/5	4.24/5	3.62/5	3.83/5	3.99/5

Student's Voice (Focus Group Interview)



- “the adjunct workshop could help **bridge the gap** between students’ learning experience in secondary schools and the education practices in tertiary programmes” (Kelvin)
- “**Student samples** were analysed and **useful expressions** for writing different sections of the assignments were taught in class... I referred to the samples and course notes and used, say, 4-5 out of 10 expressions I learnt in the workshops when I completed my assignments.” (John)

Lecturers' Voice (Interview)



- “Students could use **more accurate and specific expressions** to explain their observations in the reports. ... Now they could explain their observations using the technical terms and concepts learnt in class.” (Zenith)
- “The tailor-made materials could help students understand the **disciplinary requirements**, such as using concrete English language to describe an attraction, or adopting a “six-step approach” when writing the demand and supply analysis.” (Flora)



PEDAGOGICAL IMPLICATIONS AND KEY RECOMMENDATIONS

Pedagogical Implications



- Defining **Programme Intended English Language Learning Outcomes (P-IELOs)**:
 - Key genres in the programme
 - Lexical-grammatical resources to represent their disciplinary ways of knowing, thinking and doing .
 - Discipline-specific conventions
 - Transferable/generic academic language skills
 - e.g. critical reading skills, oral presentation skills
- The study pattern of the programmes may suggest **when and what genres** need to be introduced in the adjunct courses



Recommendation 1:



- **Provide formal channels for language and subject lecturers to collaborate**
 - **Careful planning of the teaching plan** between the content and language teachers (e.g. assignment submission deadlines, timetabling) is essential to the success of the bridging adjunct courses

→ Share materials of both subjects through MOODLE to promote pedagogical initiatives



moodle

Recommendation 2:



- **Strengthen integration of language and content assessment practices and requirements in discipline-specific subjects**
 - **The language-content link** needs to be emphasised in the adjunct courses to develop students' awareness on using appropriate linguistic resources for representing the theory/practice dialectic in discipline-specific assignments

→ Make language/communication as an assessment criteria

"Rubrics"



Recommendation 3:



- **Ascertain students' interest and views on having additional English language support**
 - **Learner motivation** is crucial to the success of the bridging adjunct courses
- **Consider offering the courses as non-credit bearing electives**



Students, esp. the stronger ones, tend to prioritise learning and assessment activities that count directly towards their subject results

Recommendation 4:



- **Diversify access to language support programmes**
 - Explore the feasibility of using flexible platforms that supplement the implementation of language support programmes to boost student participation

→ **Provide eLearning adjunct courses**



Any Questions/ Comments?



References



- Lyster, R. (2017). Content-based language teaching. In S. Loewen & M. Sato (Eds.). *The Routledge handbook of instructed second language acquisition* (pp.87-107). New York: Routledge.
- Met, M. (1999). Content-based instruction: Defining terms, making decisions. Washington, DC: The National Foreign Language Center. Retrieved from <http://www.carla.umn.edu/cobalt/modules/principles/decisions.html>
- Rothery, J. (1996). Making chances: Developing an educational linguistics. In R. Hasan, R. & G Williams (Eds.). *Literacy in society* (pp.86-123). London: Longman.
- Stryker, S.B., & Leaver, B. L. (1997). *Content-based instruction in foreign language education: Models and methods*. Washington, DC: Georgetown University Press.
- Weideman, A. (2018). *Academic literacy: Five new tests*. Bloemfontein: Geronimo. Retrieved from https://albertweideman.files.wordpress.com/2018/03/academic_literacy_aql_practice_tests_and_answers.pdf

Thank you!

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