

Frontiers of Science and Technology

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Positioning of the course

	通用英语 (G)	跨文化交际英语 (C)	专门用途英语 (S)
基础目标课程 (A)	AG	AC	/
提高目标课程 (B)	BG	BC	/
发展目标课程 (C)	CG	CC	CS
完善目标课程 (C+)	CG+	/	/

<https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions>



Content and Language Integrated Learning (CLIL)

Language: C1 level proficiency with a particular focus on mediation activities

Content: frontier topics in science and technology



CEFR

Cambridge English Qualifications™

Common European Framework of Reference (CEFR)		Cambridge English Scale	Business		IELTS	English for Primary Students Courses	English for Secondary to University Students Courses	Business English Courses
PROFICIENT	C2	230	C2 Proficiency		8.5		C2 Proficiency	
	C1	200	C1 Advanced	C1 Business Higher	7.5		C1 Advanced	C1 Business Higher (BEC Higher)
		190			7.0		Towards C1 Advanced	
INDEPENDENT	B2	180	B2 First	B2 Business Vantage	6.5		Pre- C1 Advanced	
	B2	170			6.0		B2 First	B2 Business Vantage (BEC Vantage)
		160			5.5		Towards B2 First	
BASIC	B1	150	B1 Preliminary	B1 Business Preliminary	5.0		Pre- B2 First	
	B1	140			4.5		B1 Preliminary	B1 Business Preliminary (BEC Preliminary)
		130			4.0		Pre- B1 Preliminary	
	A2	120	A2 Key			Fantastic Flyers	A2 Key	
		110	A2 Flyers				GEP 2	
	A1	100	A1 Movers			Flyers		
		90				Mighty Movers	GEP 1	
		80	Pre A1 Starters			Movers		
	Pre A1					Super Starters		
						Starters		

CAMBRIDGE ENGLISH FOR LIFE™

Comparison of Duolingo test scores to scores on TOEFL, IELTS, TOEIC, and CEFR

DET SCORE	CEFR Level	IELTS SCORE	TOEFL SCORE	TOEIC SCORE
160	C2	9.0	118-120	990
		8.5	115-117	
150-155	C1	8.0	110-114	855-985
140-145		7.5	102-109	
130-135		7.0	94-101	
<u>120-125</u>	B2	<u>6.5</u>	<u>79-93</u>	755-850
105-115		6.0	60-78	
95-100		5.5	46-59	650-750
<u>80-90</u>	B1	<u>5.0</u>	<u>35-45</u>	
65-75		4.5	32-34	
10-60	A1-A2	0.0-40	0-31	0-645

Table 1. Common European Framework of Reference (CEFR) Cut Scores for the TOEFL iBT Test

CEFR level	Reading (0–30)	Listening (0–30)	Speaking (0–30)	Writing (0–30)	Total (0–120)
C2	25				
C1	24	22	25	24	95
B2	18	17	20	17	72
B1	4	9	16	13	42
A2			10	7	
A1			5		



Tentative Schedule

Wk	C1&2	C3&4	Module	TOPIC
1	9/11	9/12		Introduction (C level English proficiency, scientific literacy)
2	9/18	9/19		Essential skills (Reading, Summarizing, Issue)
3	9/25	9/26	AI and the brain	Dyslexia
4	10/2	10/3		National Day Holiday
5	10/9	10/10		AI
6	10/16	10/17		The brain (Brain-computer interface)
7	10/23	10/24	Life science and medicine	Gene editing
8	10/30	10/31		Cancer treatment
9	11/6	11/7		Quiz
10	11/13	11/14	Climate and energy	Climate
11	11/20	11/21		Nuclear fusion
12	11/27	11/28	National competitiveness	5G
13	12/4	12/5		Chips
14	12/11	12/12		Quantum science and technology
15	12/18	12/19		Space exploration
16	12/25	12/26	Fun	Metaverse



Hours it will take to get to the target level

Level of English (CEFR)	Number of hours of instruction
Zero to A1	70 hours
A1 to A2	150 hours
A2 to B1	300 hours
B1 to B2	200 hours
B2 to C1	200 hours
C1 to C2	200 hours

Source: EF



Hours it will take to get to the target level

EnglishProfile Studies

4

The CEFR in Practice

Brian North

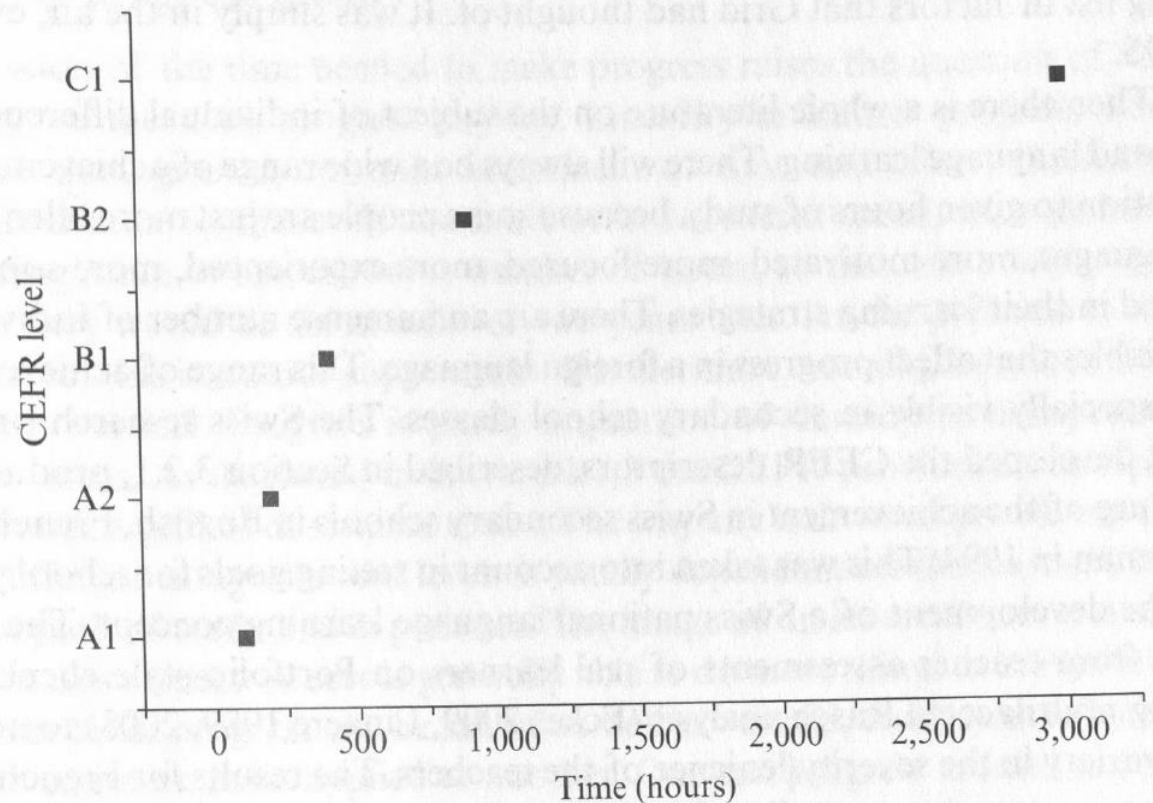
Series editors:
Michael Milanovic and Nick Saville

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The CEFR Common Reference Levels

Figure 3.2 Progress and hours of study in Finland (Takala 2010a:103)



Hours it will take to get to the target level

cism. For English, however, the outcome was regular and intuitively sensible. After two years of English (= c.160 hours) a considerable majority of 15–16 year olds had reached A2, whilst half the Gymnasium students had achieved B1 or above after two years. The main point, however, was the wide range of difference in the proficiency achieved. After three years (= c.240 hours) this range of achievement was from A1 to B1+ for both lower secondary school and Gymnasium; in Gymnasium after six years (= c.480–600 hours), the range was from B1+ to C1. In adult sector evening classes the ranges were even greater. For example after three years, the proficiency reached varied from below A1 to B2, though most were between A2 and B1+. After six or seven years the range was from A2+ to B2+, with 50% at B1/B1+ (North 2000a: 322–325). Takala (2010a:102) cites Tuokko's (2007) study with similar findings concerning Finnish secondary school. In the CEFR-linked tests for 15–16 year olds who had received seven years of English, 39% reached B1, but 34% were still A2 with 4% below that. Meanwhile, 23% reached B2.

In an attempt to summarise all the information available, John De Jong (personal communication) recently presented ranges of time required to reach different levels. The 400 hours for B1 is optimistic according to his calculations, which suggest a range from 380 hours (fast learners) to 1,386 (slow learners). For C1 the range is from 1,520 hours (fast learners) to 4,490 hours (slow learners) – which neatly straddles Takala's estimate of an average of 3,000 for his graph.



Assessment (Tentative)

- ▶ **Weekly Performance + final review 30%**
 - ▶ 2%/week (9 highest)
 - ▶ Presentation 10%
 - ▶ Final review (2%)
- ▶ **Quiz 20%**
- ▶ **Final exam 50%**
 - ▶ Explanation of terms 25%
 - ▶ Diagram description 25%
 - ▶ Summary 25%
 - ▶ Issue 25%



Presentation

- ▶ Groups of 2-3
- ▶ Focus on a frontier issue either in academia or in industry
- ▶ Follow the usual presentation practice
(**NOT** textbook/lecture/lab meeting style)
- ▶ Be coherent/Have flow
- ▶ Do it in less than 5 minutes/presenter

- ▶ Other **DON'Ts**
 - ▶ NO politics
 - ▶ DON'T shout slogans



Attendance

► <http://dean.pku.edu.cn/2011xssc/xjglxz.htm>

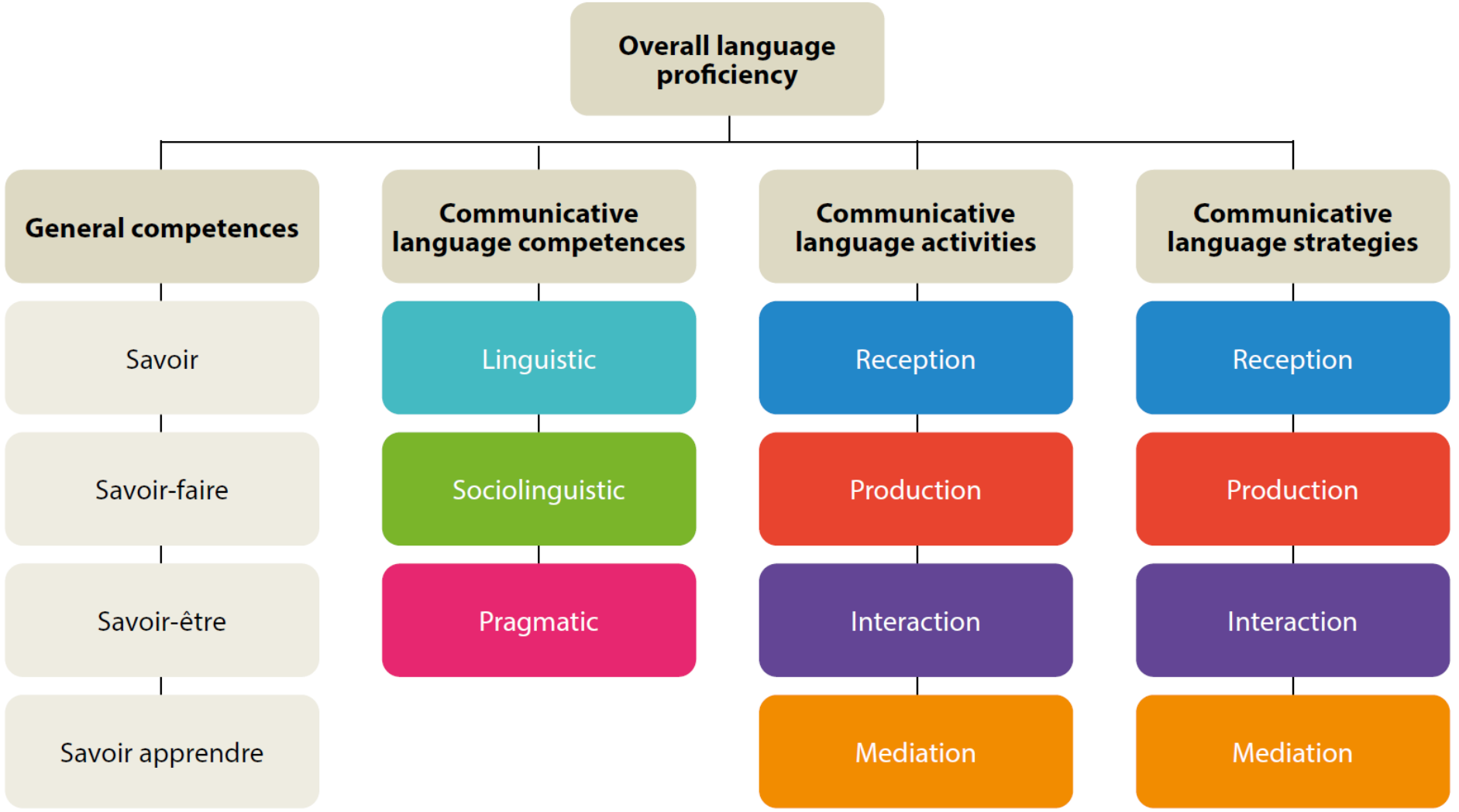
12	学生考勤	<ol style="list-style-type: none">1. 从第二周开始记录学生考勤。2. 如发现学生缺课 3 次或以上，请将学生姓名、学号、班级发邮件报教研室。由教研室通知该生所在院系。3. 平时成绩中，考勤不能作为得分项，只能用作扣分项。所有学生标准统一：迟到 1 次扣 1 分；旷课 1 次扣 2 分；请假须出示假条，不扣分。
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The Common European Framework: Action-Oriented Approach

Language use, embracing language learning, comprises the actions performed by persons who as individuals and as social agents develop a range of **competences**, both **general** and in particular **communicative language competences**. They draw on the competences at their disposal in various contexts under various **conditions** and under various **constraints** to engage in **language activities** involving **language processes** to produce and/or receive **texts** in relation to **themes** in specific **domains**, activating those **strategies** which seem most appropriate for carrying out the **tasks** to be accomplished. The monitoring of these actions by the participants leads to the reinforcement or modification of their competences.

Figure 1 – The structure of the CEFR descriptive scheme²⁸



From the four skills to language activities

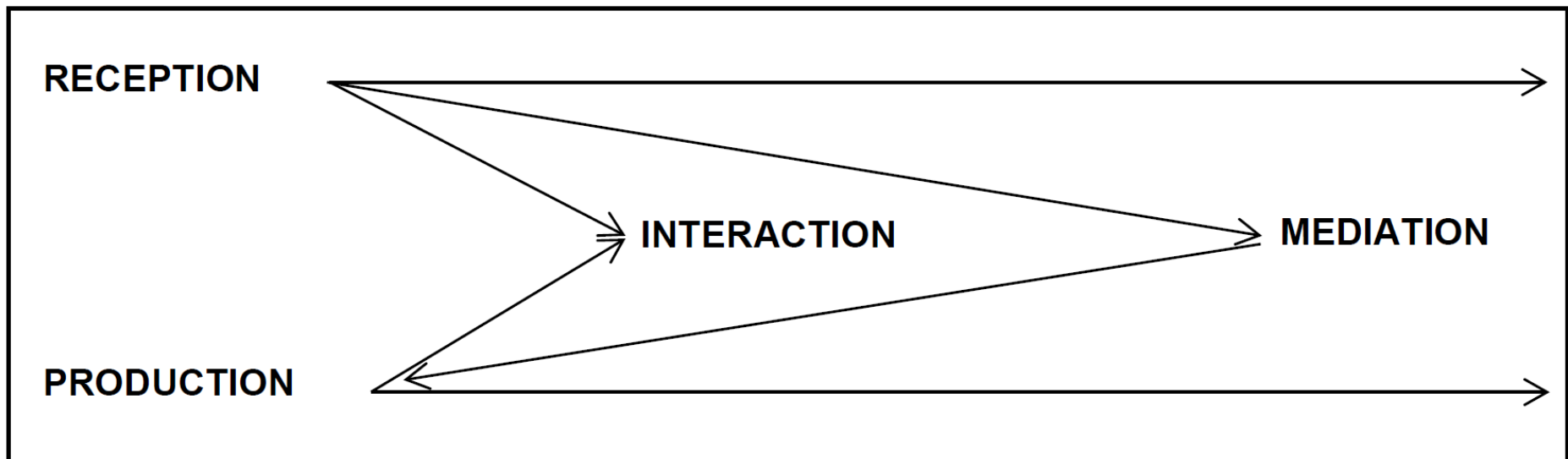


Figure 2 – The relationship between reception, production, interaction and mediation.

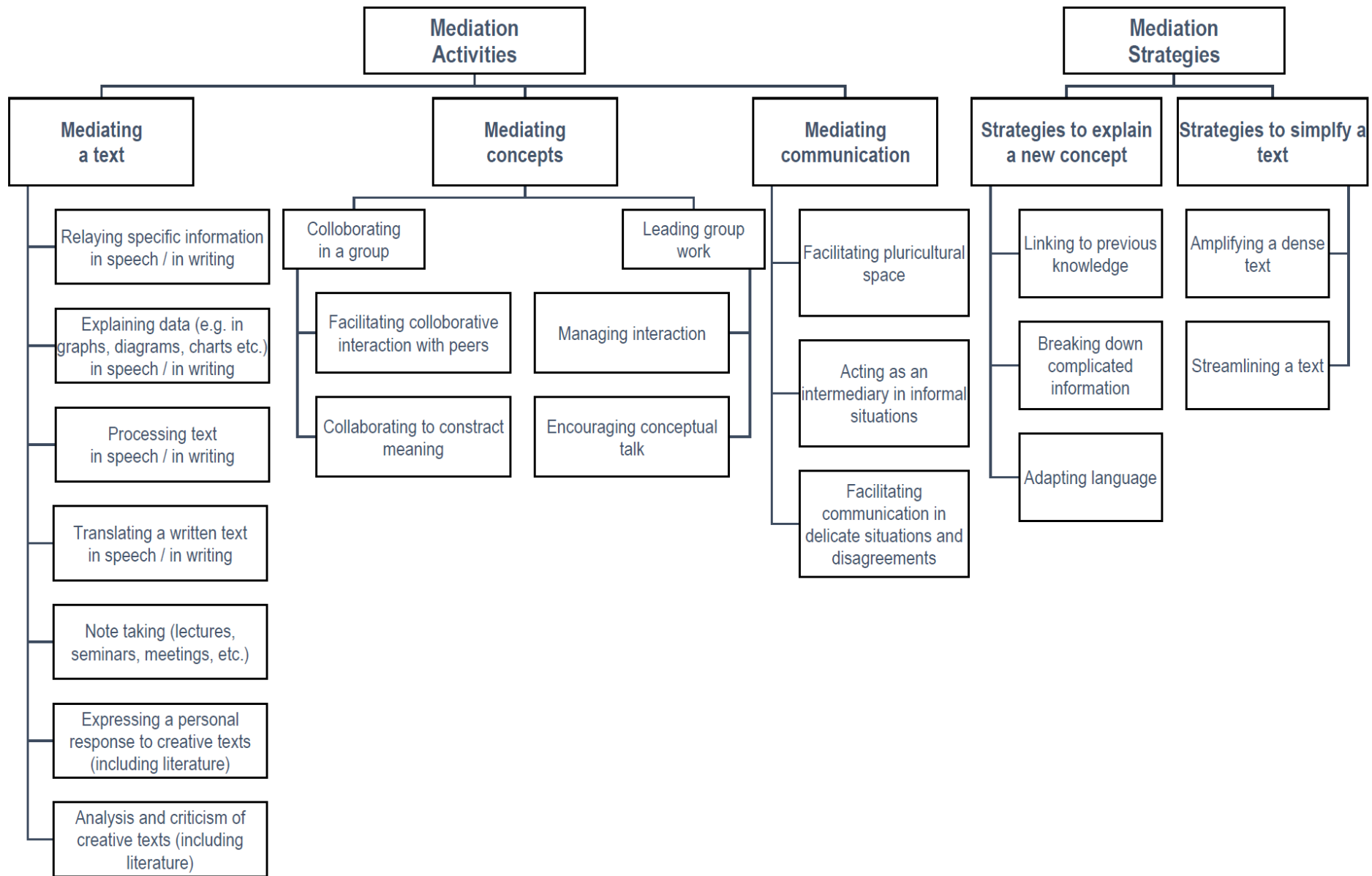
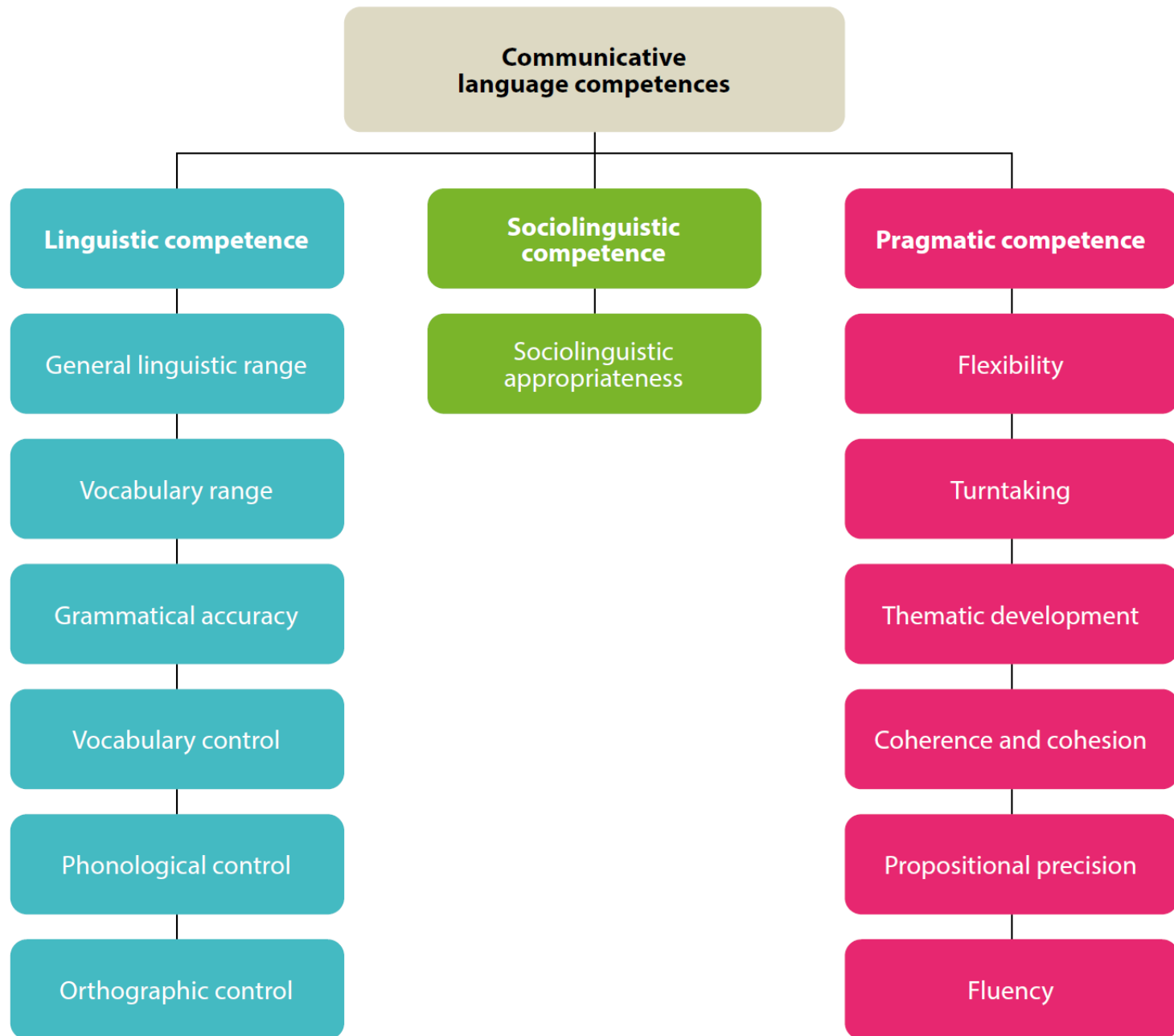


Figure 16 – Communicative language competences



Assignments

- ▶ Self assessment (info @教学网, submission @kcpug.pku.edu.cn)
- ▶ (Optional self assessment) Dialang (<https://dialangweb.lancaster.ac.uk/>), submission @kcpug.pku.edu.cn



Happy new semester

- ▶ Love does not consist in gazing at each other, but in looking outward together in the same direction.
- ▶ Antoine de Saint-Exupery
- ▶ 愛不是彼此凝視，而是望向同一個方向

