城市轨道交通实用英语 PRACTICAL ENGLISH FOR URBAN RAIL TRANSIT

主 编◎刘 娟 唐逸萍 副主编◎李春香 王美岭 罗 婧



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Practical English for Urban Rail Transit

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总序// FOREWORD

教育部、国家发展改革委、财政部《关于引导部分地方普通本科高校向应用 型转变的指导意见》指出:

"当前,我国已经建成了世界上最大规模的高等教育体系,为现代化建设做出了巨大贡献。但随着经济发展进入新常态,人才供给与需求关系深刻变化,面对经济结构深刻调整、产业升级加快步伐、社会文化建设不断推进特别是创新驱动发展战略的实施,高等教育结构性矛盾更加突出,同质化倾向严重,毕业生就业难和就业质量低的问题仍未有效缓解,生产服务一线紧缺的应用型、复合型、创新型人才培养机制尚未完全建立,人才培养结构和质量尚不适应经济结构调整和产业升级的要求。"

"贯彻党中央、国务院重大决策,主动适应我国经济发展新常态,主动融入产业转型升级和创新驱动发展,坚持试点引领、示范推动,转变发展理念,增强改革动力,强化评价引导,推动转型发展,高校把办学思路真正转到服务地方经济社会发展上来,转到产教融合校企合作上来,转到培养应用型技术技能型人才上来,转到增强学生就业创业能力上来,全面提高学校服务区域经济社会发展和创新驱动发展的能力。"

高校转型的核心是人才培养模式,因为应用型人才和学术型人才是有所不同的。应用型技术技能型人才培养模式,就是要建立以提高实践能力为引领的人才培养流程,建立产教融合、协同育人的人才培养模式,实现专业链与产业链、课程内容与职业标准、教学过程与生产过程对接。

应用型技术技能型人才培养模式的实施,必然要求进行相应的课程改革,我们这套"转型发展系列教材"就是为了适应转型发展的课程改革需要而推出的。

希望教育集团下属的院校,都是以培养应用型技术技能型人才为职责使命的,

人才培养目标与国家大力推动的转型发展的要求高度契合。在办学过程中,围绕培养应用型技术技能型人才,教师们在不同的课程教学中进行了卓有成效的探索与实践。为此,我们将经过教学实践检验的、较成熟的讲义陆续整理出版。一来与兄弟院校共同分享这些教改成果,二来也希望兄弟院校对于其中的不足之处进行指正。

让我们共同携起手来,增强转型发展的历史使命感,大力培养应用型技术技能型人才,使其成为产业转型升级的"助推器"、促进就业的"稳定器"、人才红利的"催化器"!

2016年6月

前言// PREFACE

近年来,随着世界范围内人口向城市集中、城市化步伐加快,城市轨道交通专业成了热门专业,对人才的大量需求促进了专业本身的发展。2013年,北京国际城市轨道交通建设运营及装备展览会的举行,标志着中国已经进入城市轨道交通快速发展期。"高铁外交"正把中国高铁推向国际市场,在此背景下,新兴的城市轨道交通行业需借鉴各国的先进技术,如此培养出来的轨道交通人才的输出也会提高中国的影响力。

目前,各个行业急需既精通专业领域知识又有较强外语能力的复合型人才。英语学习不能仅仅停留在通识英语的层面上,而应结合各个具体行业运用到实践中去。在高校转型改革和培养"应用型人才"的大背景下,培养城市轨道交通专业综合人才,将行业英语与专业课程结合起来学习显得尤其必要。

就城市轨道交通发展现状来看,北京、上海、广州已位居世界前列。在中西部地区,成都地铁1号线于2010年9月27日正式开通,为中西部首条地下铁线路,随后成都地铁进入高速发展期,截至2018年3月22日,成都已开通6条线路,在建线路达到10条。除了地铁,成都的现代有轨电车、磁悬浮列车、熊猫空轨等城市轨道交通也正在如火如荼地建设和试验当中,呈现出一片蓬勃发展的态势。目前已有的相关教学资源,大多以北京、上海、广州等城市的轨道交通为例。本教材以成都的城市轨道交通建设为主、其他城市为辅进行编写,以期本地的读者能在日常熟悉的生活场景中更好地学习与运用。对其他城市的读者来说,可参考本教材的情景框架,结合所在城市的具体情况,予以内容上的调整和替换。

本教材由两个部分组成。第一部分: 地铁。包括 Inquiry, Ticket Service, Subway Security, Taking the Metro, Operational Control 五个单元。第二部分: 其他城市轨道交通方式。包括 Light Rail, Tram, Maglev, Monorail 四个单元。每个单元由 Lead-in, Situational Dialogues, Reading 三个版块及相应练习组成。Lead-in 配以插图,引入本单元的主要内容; Situational Dialogues 以情景对话的方式呈现,注重口语实践,培养学生的实际运用能力; Reading 部分选取国内外相关的最新材料,材料中包含大量的专业词汇,同时配有译文,有助于提高学生阅读、翻译本专业英语文献的能力。本书最后附上习题的参考答案和成都地铁线路图,以供读者参考使用。

本教材由西南交通大学希望学院刘娟、唐逸萍任主编,两人负责总体规划设计、组织编写。具体编写分工如下: 唐逸萍编写 Unit 1, 王小芳编写 Unit 2, 王美岭编写 Unit 3, 吴彦龙编写 Unit 4, 袁冬坪编写 Unit 5, 李春香编写 Unit 6, 罗婧编写 Unit 7, 范莎莎编

写 Unit 8, 冯坦编写 Unit 9。全书由唐逸萍进行统稿定稿,李春香、王美岭、罗婧协助定稿。

本教材系 2018 年四川省教育厅科研项目"城市轨道交通专业英语教学模式改革研究"(项目编号 18SB0768)的最终成果形式之一。在编写过程中,得到了西南交通大学希望学院校领导的大力支持,同时轨道交通学院的专业教师提出了宝贵的意见和建议,为本书的完成贡献了很多的力量,在此向他们表示衷心的感谢。由于编者水平有限,书中难免有不妥之处,敬请读者不吝批评指正,并将意见反馈到邮箱896776462@qq.com,不胜感激。

編者 2018 年 4 月

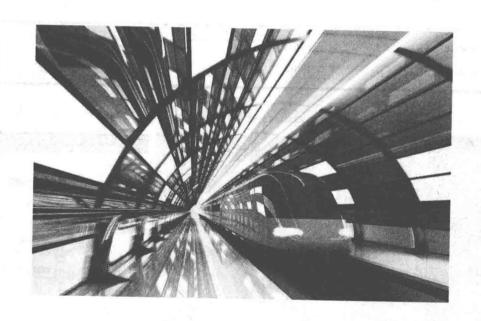
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Subway



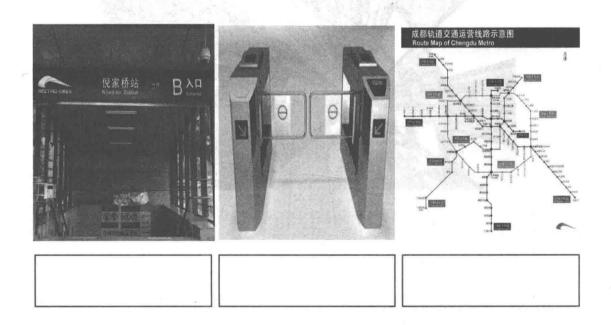


Unit One Inquiry

Lead-in

Match the following pictures with the words in the box.

turnstile route platform
entrance peak schedule





	柱升也助方间		在广新55円	
站名	開班车	未班车	製地市	未現东
升仙湖		-	6:20	23:00
火车北站	7:01	23:41	6:22	23:03
人民北路	6:58	23:39	6:24	23:05
文殊院	6:56	23:37	6:27	23:07
運場市	6:54	23:35	6:29	23:09
天府广场	6:52	23:33	6:31	23:11
研究工程管	6:50	23:31	6:33	23:13
华西坝	6:49	23:29	6:34	23:15
创体育馆	6:47	23:27	6:36	23:17
税旅桥	6:45	23:25	6:38	23:19
HQ1618	6:43	23:23	6:40	23:21
火车商	6:41	23:21	6:42	23:23
高折	6:38	23:19	6:45	23:25
金融城	6:36	23:17	6:47	23:27
前化磁	6.35	23:15	6:49	23:25
根据广场	6:33	23:13	6:50	23:31
MISM	6:30	23:11	6:53	23:33
天府三街	6:28	23:09	6:55	23:35
天府五部	6:26	23:07	6:57	23:37
华府大道	6:24	23:05	6:59	23:39
施岗	6.22	23:02_	7:01	23:42
广新	6:20	23:00		-



Section A: Situational Dialogues

Dialogue 1

It's George's first visit to Chengdu, and he is inquiring a metro employee about taking the subway.

G = George

 $M = Metro\ employee$

M: Good morning, sir. Can I help you?

G: Yes, please. I'm new here. Could you tell me how to take the subway?

M: First, you need to buy a ticket at the ticket center. Then **swipe** the ticket at the **turnstile**, and it will open. You can pass through it and walk downstairs to the **platform**.

G: I see. How do I leave the platform after getting off the train?

M: That's easy. You **insert** the ticket into the **slot** at the turnstile, and the ticket will be taken automatically. Then you can go through the turnstile and **exit** the station.

G: How long is the **interval** between trains?

M: The interval between trains is different in **peak** hours and non-peak hours.

G: When is the peak hours?

M: From Monday to Friday, the morning peak is defined as 7:00 – 9:00, and the evening peak 17:00 – 19:00. Normally, the interval in peak hours is about 2 minutes, and 5 minutes in non-peak hours.

G: What's the **departure** time of the first and the last train?

M: For most of the Lines, it's 6:30 - 22:30. But the time for each stop is different. Here is the time **schedule** of Chengdu Metro, you can refer to it.

G: Thanks a lot.

Words to Know

inquire	[in'kwaiə(r)]	vt. & vi. ask for information about sth. 打听, 询问
swipe	[swaɪp]	vt. to pass a plastic card through a special machine that is able to read the information that is stored on it 刷 (磁卡)
turnstile	[ˈtɜːnstaɪl]	n. a mechanical barrier at the entrance to a place (入口处等的)旋杆,闸机
platform	['plætfo:m]	n. the raised flat area beside the track at a train station where you get on or off the train 站台
insert	[ɪnˈsɜːt]	vt. to put sth. into sth. else or between two things 插入,嵌入
slot	[slɒt]	n. a long narrow opening, into which you put or fit sth. (投放或插入东西的)窄缝, 扁口
exit	['eksɪt]	n. a way out of a public building or vehicle 出口, 通道 vi. to go out, to leave a building, stage, etc. 出去, 离去
interval	[ˈɪntəvl]	n. a period of time between two events (时间上的)间隔,间隙
peak	[pi:k]	n. the point when sb./sth. is best, most successful, strongest, etc. 顶峰, 高峰
departure	[dɪˈpɑːtʃə(r)]	n. a plane, train, etc. leaving a place at a particular time (在特定时间)离开的飞机(或火车等)
schedule	['ʃedju:l]	n. a plan that lists all the work that you have to do and when you must do each thing 时刻表, 进度表

Phrases and Expressions

pass through

经过,通过

walk downstairs

下楼

peak hour

高峰时段

non-peak hour

非高峰时段

Dialogue 2

George is now at the North Railway Station, Chengdu. He is going to Mingshu Royal Cemetery, so he is asking a metro employee for direction.

G = George $M = Metro\ employee$

G: Excuse me, could you help me figure out how to get to Mingshu Royal Cemetery?

M: You can't get there directly from here and it's a little complicated. Let me show you on the map.

G: That's great.

M: There are two ways. You can take Line 1 and after 3 stops, get off at Luomashi Station. Then **transfer** to Line 4 bound for Xihe. The other one is to take Line 7 to Huaishudian, and then also transfer to Line 4 to the **destination**.

G: Which way is faster?

M: They are almost the same **mileage**. But if you choose Line 7, you must take the inner-circle, which runs in a **clockwise** direction based on this map. It's much faster than the outer-circle.

G: How long would it take me to get there?

M: It's approximately 30 minutes in total.

G: So nice of you. Thank you so much.

M: My pleasure. Remember, don't take the train in the opposite direction.

Words to Know

transfer	[trænsˈfɜ:(r)]	vt. & vi. & n. the act of transporting sth. from one location to another 换乘, 转移
destination	[,desti'neisn]	n. a place to which sb./sth. is going or being sent 目的地,终点
mileage	[ˈmaɪlɪdʒ]	n. the distance that a vehicle has travelled, measured in miles 英里数, 里程
clockwise	[ˈklɒkwaɪz]	adj. & adv. moving around in the same direction as the hands of a clock 顺时针方向的(地)
opposite	[ˈˈɒpəzɪt]	adj. on the other side of a particular area from sb./sth. and usually facing them 相对的,对面的

Phrases and Expressions

figure out

弄明白,解决

bound for

驶往

inner-circle

内环

outer-circle

外环

>>>> Exercise 1: Vocabulary

Fill in the blanks with cor 闸机	刷卡
插卡	
站台	
时刻表	
高峰期	
	, and it that it are in part of
TO 10	emança
	STOTISE
>>> Exercise 2: Re	esponse
	sponse
Suppose you are a metro	employee. Give your response to the following situations.
	employee. Give your response to the following situations.
Suppose you are a metro	employee. Give your response to the following situations. e's Park from here?
Suppose you are a metro of 1. How can I get to Peopl 2. When will the next train	employee. Give your response to the following situations. e's Park from here?

>>>> Exercise 3: Role Play

Work with your partner to create a dialogue based on the given situation.

Suppose you are an employee at Chengdu Metro Station, and your partner Tony is a

5. Could you give me some suggestions about the tourist attractions near Metro stations?

foreigner. He wants to know how to take the subway and the route from East Railway Station to Chengdu Zoo and other attractions near the Metro as well. Create a dialogue by referring to the diagram in Appendix II.

Section B: Reading

Urban Rail Transit in China

Urban rail **transit** in the People's Republic of China **encompasses** a broad range of urban and suburban electric passenger rail mass transit systems including subway, light rail, **tram** and **maglev**. Some classifications also include non-rail bus rapid transport. By the end of 2016, there are 30 metro systems in Chinese mainland with a total combined length of 3,586 kilometers. Today China **boasts** both the world's longest, second and fourth longest metro systems. The Shanghai Metro only started operating in 1993 and has since expanded to be the world's longest subway system. Out of the top 10 busiest metro systems in the world 4 of them are in China. As of January 2016, 39 cities have metro systems approved according to the National Development and Reform Commission. China plans to spend 4.7 trillion yuan (\$706 billion) on transport **infrastructure** in the next 3 years. As of early 2017, China has 5,636.5 km of under **construction** rail transit lines.

Several Chinese cities had urban electric tramways in the early 20th century, which were dismantled in the 1950s to 1970s. Nanjing had an urban railway from 1907 to 1958. The first subway in China was built in Beijing in 1969. The Tianjin Metro followed in 1984. Hong Kong, at the time still under British rule, completed its first section of subway in 1979. Today, Hong Kong's MTR Corporation has investment, consulting and management stakes in the rapid transit systems of several mainland cities.

The rapid growth of the Chinese economy since the late 80s has created a huge surge in demand for urban transport. This prompted cities across China to pursue and draft proposals for subway networks, with Shanghai and Guangzhou opening their first sections of subway in the 90s, inspiring more cities to propose subway networks. In 1995, the Central Government, alarmed by the high cost and financial debt from these ambitious subway plans, put out a "notice on the suspension of approval of urban underground rapid rail transit projects". At the time Nanjing, Wuhan, Chongqing, Dalian and Shenzhen had advanced proposals waiting to be approved. Wuhan, Chongqing, and Dalian managed to circumvent the moratorium on subway construction by constructing and opening lower cost elevated light metros and monorails in the early 2000s. Rapid urbanization of China leads to severe congestion and

pollution in urban areas leading to the suspension being lifted. Initially, light metro lines using small **profile** and shorter rolling stock were constructed to reduce costs. It was assumed that as **ridership** grows, the line will operate trains at a low headway to increase capacity. This design **paradigm** was known in China as "small groups, high density" operation. However, after a few years operating, many of these lines such as Guangzhou Metro Line 3, Shanghai Metro Line 6 and Line 8 were severely overcapacity. This led many cities such as Beijing, Guangzhou, Wuhan and Chengdu to use higher capacity designs on newer lines.

Since the early 2000s, the growth of rapid transit systems in Chinese cities has rapidly accelerated, with most of the world's new subway mileage in the past decade opening in China. From 2009 to 2015, China built 87 mass transit rail lines, totaling 3,100 km, in 25 cities at the cost of 988.6 billion yuan. In 2016, the Chinese government lowered the minimum population criteria for a city to start planning a metro system from 3 million to 1.5 million residents. As part of the 13th Five Year Plan, the Chinese government published a transport white paper titled "Development of China's Transport". The plan envisions a more sustainable transport system with priority focused on high-capacity public transit particularly urban rail transit and bus rapid transit. All cities with over 3 million residents will start or continue to develop urban rail networks. Regional rail networks will be constructed to connect and integrate urban agglomerations such as the Jingjinji, Yangtze River Delta and Pearl River Delta areas. In 2017, some 43 smaller third-tier cities in China, have received approval to develop subway lines.

The first subway in west China was launched on September 27, 2010 in Chengdu, capital of Southwest China's Sichuan province.



West China's First Subway Starts Operation

Passengers read newspapers in a subway train in Chengdu city on Monday.

[Photo/Xinhua] Updated: 2010-09-27 21:45