Integrated Performance Assessment (IPA)
Part Four

Introduction

This portion of the IPA begins with an activity to engage students in a review of the unit's cross-cultural chart and discussion of the similarities and differences among Salvadoran, Chinese and US cultures, inviting students to make connections between these cultures and their own lives. These activities will assist in preparing students for the final part of the IPA, the interpersonal tasks. **Interpersonal Task 1**: Joint sort and sequence task (Engineering Design Process and Scientific Method) allows students to demonstrate understanding of the Engineering Design Process and Scientific Method by collaborating to sort and then sequence the steps in these two processes**. Interpersonal Task 2:** Peer-peer question and answer discussion of *Juan Daniel* story and cross-cultural information regarding El Salvador, China and the US. Pairs will be asked to reflect on the story and then highlight similarities and differences among these three cultures.

While pairs of students are being called by the teacher, one after the other, to complete the two Interpersonal tasks, the remaining students are working in groups and using peer and teacher feedback to create final drafts of the email written presentational task.

Note: During administration of the interpersonal assessment, it is highly recommended that teachers find an educational assistant who speaks Chinese and can support student groups as they work on final versions of their emails. The teacher will be fully engaged with student pairs as they carry out the interpersonal tasks.

© 2012 Fortune, T., Wieland, M., and MMIC Team

Part Four: Interpersonal Tasks
(associated with *Juan Daniel*, Chapter 8)

Assessment Topic: How do scientists and engineers do their work using the scientific method and the engineering design process? In what ways are Salvadoran, US and Chinese cultures similar and different? What text-to-self connections can you make with the *Juan Daniel* story?

DESIRED RESULTS (教学目标)

Academic Content Assessment Objectives: Students can...

Chinese Language Arts

- Adhere to grade-level appropriate speaking and writing conventions
- Engage in spontaneous informal conversation to negotiate and achieve consensus
- Recall and evaluate elements (e.g., characters, setting, events, problem, solution) of the *Juan Daniel* story
- Make text-to-self connections with *Juan Daniel* story and discuss surprises, likes, and/or dislikes
- Collaboratively compose final version of email using earlier drafts along with peer and teacher feedback

Science and Engineering

- Identify and order steps of the scientific method and engineering design process
- State and give reasons for a "favorite" step of the scientific method or engineering design process
- Make connections between a "favorite" step and what occurred during that step in either the raisin experiment (scientific method, Lesson 9) or model membrane design process (engineering design process, Lessons 11-13)
- Report test results and materials used for first and "improved" model membrane designs
- Give reasons for key design changes between initial and "improved" models
- Evaluate changes in "improved" model membrane design

Social Studies and Culture

- Use information about El Salvador, the US and China on cross-cultural chart to identify and justify travel and other personal interests/preferences
- Compare and contrast places/products/practices found in El Salvador, China and US
- Distinguish between formal and informal email writing styles in Chinese, specifically differences in greeting, personal pronoun use and closing

© 2012 Fortune, T., Wieland, M., and MMIC Team

Learning Strategies: Students can…

- Skim and scan written text for specific information
- Classify information
- Use journals and handouts that they have already written to help them "mine" chunks of language that they can use as they write
- Work cooperatively with a partner and with a group
- Use peer and teacher feedback to revise written work

© 2012 Fortune, T., Wieland, M., and MMIC Team

Chinese Language Objectives: Students can…

Functions and Forms

Content-obligatory (CO)

- State or identify attributes of something/someone using a predicative construction with the main noun modified by a relative clause
- Identify similarities and differences between two things using topic as noun/verb phrase at sentence beginning
- Give emphasis to the specific direct object by using 把 or 让/使 construction and placing the direct object before the verb
- Express location using 在 [zài] in a locative phrase
- Support ideas/opinions using compound sentences with adverb 因此
- Construct characters to form words and phrases adhering to character structure rules and stroke order guidelines
- Use a developing understanding of basic units of word formation in Chinese to infer and construct meaning with written text
- Ask and answer questions using question words
- Recount events in simple past time using action verbs with 了 (temporal marker) and dependent time phrase/clause in complex sentence
- Describe attributes of person/place/thing using modifying phrases
- Describe emotional states of main characters using adjectives or adverbs
- Distinguish the superlative degree among two or more things/ideas within a topic using a locative phrase 在…里/在…中 to identify the whole topic, and the superlative adverb 最
- Predict cause-effect relationship using hypothetical conditional sentences with 如果/要是……, (那么)…… and the adjectival verb 可能

Content-compatible (CC)

- Express a personal opinion
- Express agreement/disagreement
- Negotiate to reach consensus
- Negotiate turn-taking
- Request feedback
- Accept feedback/advice/idea
- Ask for clarification about feedback/advice/idea
- Order a series of events using sequencing adverbs
- Express gratitude

© 2012 Fortune, T., Wieland, M., and MMIC Team

Vocabulary

	Recognize（了解）	Produce（识记）
Content-obligatory	**Email Writing Activity** 空格 spacing, 标点符号 punctuation, 缩进 indentation, 打草稿 to draft, 修改 to revise, 编辑 to edit, “收信人名字” “name of recipient”, 问候 greeting, 归档 file, 部分 section, 主题 subject 正文 body of a letter or an email, 结束语 closing, 祝语 well wishes,署名 signature, 日期 date **Cross Cultural Chart** 跨文化比较 cross-cultural comparisons, 习俗 practices, 土产 products, 观点 perspectives **Story-Related Words** 启发 inspiration, 决心 determination, 技巧 skill, 小心翼翼 carefully, 获得 gain	**Professional People** 工程师 engineer, 生物工程师 bioengineer, 科学家 scientist **Engineering Design Process** 工程设计步骤 Engineering Design Process, 提问 ask, 思考 imagine, 设计 plan, 制作 create, 改进 improve, 步骤 step, 设计 to design, 模型 to model/modeling, 工程师 engineer, 实验 experiment, 科学家 scientist , 薄膜 membrane, 结果 result, 改变 changes (noun),去解决实际问题 to solve real-world problems, 试一试新的想法 to try out new ideas, 运用想象力 to use imagination, 改进的 improved **Scientific Method** 科学方法 Scientific Method 提问 ask questions, 假设 make hypothesis, 测试 test hypothesis, 分析 analyze results, 结论 draw conclusions, 汇报 report results , 实验 experiment**,** 记录 to record, 观察 to observe **Materials-Related** 容器 container, 盖子 lid, 铝箔纸 aluminum foil, 有一个孔的铝箔纸 aluminum foil with one hole, 有两个孔的铝箔纸 aluminum foil with two holes, 咖啡过滤纸 coffee filter, 纱布 cheesecloth, 毡布 felt, 海绵 sponge, 尼龙纱窗布 nylon screen, 材料 materials, 闪亮 shiny, 平滑 smooth, 厚 thick, 薄的 thin, 纸做的 made of paper, 有洞/有孔 has holes, 没有洞/没有孔 does not have holes, 有用/管用 works well, 没有用/不管用 does not work well

© 2012 Fortune, T., Wieland, M., and MMIC Team

		Cross Cultural Chart 大陆 continent, 气候 climate, 语言 language, 食物 food, 流行的运动 popular sports, 运动偶像 sports idol, 人口 population, 首都 capital city, 热带雨林 rain forest, tools for eating, 送礼 gift-giving, 告别 leave-taking, 萨尔瓦多的 Salvadoran, 中国的 Chinese, 美国的 American, 文化习俗 culture and custom

© 2012 Fortune, T., Wieland, M., and MMIC Team
Engineering is Elementary® "Model Membrane" Unit

	Recognize（了解）	Produce（识记）
Content-compatible	**Assessment Words** 测试 assessment, 反馈 feedback, 反馈圈 feedback loop, 综合的 integrated, 表现 performance, 理解的 interpretive, 表达的 presentational, 交流的 interpersonal, 同学评估 peer evaluation, 自我评估 self-assess", ment, 评分表 rubric, "准确地汇报" "accurately report "清楚地演示" "clearly present", "正确地使用" "correctly use", "连动词结构" "serial verb construction", "修饰语" "modifying phrases", 量词 classifiers, 复合句 compound sentence, 比较级 comparative expression, 视觉接触 eye contact, 评估 to evaluate, 标准 criterion, 质量 quality, 数量 quantity, 语言控制 language control **Assessment Activities** 全班 whole class, 小组 small group, 同伴 pairs/partners, "合作分类并排序" "joint sort and sequence", 分类 to sort, 排序 to order (place in order), 排先后顺序 to sequence, "从文章到自己的联系" "text-self connection", 达成共识 to negotiate consensus, 手势 gestures, 跨文化表的类别 cross cultural chart category, 开动的火车 choo choo train, 火车的笛声 train whistle, 火车售票员的叫声 train conductor's call, "谈谈" "chat", 火车站 train station, 鼓掌 to clap, 欢呼 to cheer **Mind Maps®** 三重维恩图 Triple Venn Diagram®	**Assessment Activities** 感谢 Thank you (formal register), email, 收件人 to, 发件人 from, 发送 to send, 称谓 name, 附件 attachment, 附带 attached, 最喜欢的 favorite, 人物 character, 问题 problem, 解决方案 solution, 使……惊讶 surprise, 相似的 similar, 不同的 different **Adverbs/Adverb Phrases** 慢 slow, 中 medium, 快 fast, 全部 all, 部分 some, 没有 none, 太多 too much, 太少 too little, 正好 just right/exact amount, 最多 at most, 更 even more, 约 approximately **Measurement Words** 度量衡 measurement, 液体量杯 measuring cup, 二分之一 ½, 四分之一 ¼ 分数 fraction, 小数 decimal, 测量 to measure, 成功 success, 杯 cup, 毫升 milliliter, 体积 volume, 通过 to pass through, 倒 to pour **Adjectives** 厚 thick, 薄 thin, 孔 small hole, 大小适中 right-sized, 适合 suitable, 管用/不管用 useful/not useful **Action Words** 演示 to present, 改进 to improve, 制作 to create, 计划 to plan, 改变 to change, 比 to compare, , 代替 to replace, 收集 to collect, 控制 to control, 滴 to drip, 测试 to test, 描述 to describe **Job Cards/Roles** 中文督察员 Chinese Champion, 材料管理员 Magnificent Materials Manager, 记录员 Remarkable Recorder, 工作管理员 Terrific Taskmaster, 演示质检员 Polished Presenter

***Note**: In the **Language-Function-Form-Vocabulary Connection** section you will find additional vocabulary that is directly supportive of the various language functions. The particular words and phrases you choose to target will depend on your students' proficiency levels. Because of*

© 2012 Fortune, T., Wieland, M., and MMIC Team

this, we have not included all vocabulary here. At the end of this lesson, you will find a table that provides more detailed information about the lesson vocabulary identified above.

© 2012 Fortune, T., Wieland, M., and MMIC Team

PREPARATION (教学准备)

Materials Needed for IPA 4

- MMIC IPA 4-IWB
- Integrated Performance Assessment Overview Poster (page 1 of MMIC IPA 4-IWB)
- Laminated "job" cards for groups
- Flipchart poster paper for stations, one per station
- Handouts:
    a. MMIC IPA 3-1: *Ms. Peters Email Section Strips*, one copy per pair of students
    b. MMIC IPA 3-2: *IPA 3 Visiting Engineer Email Section Strips*, one copy per group
    c. MMIC IPA 3-3: *IPA 3 Email Peer Feedback Checklist,* one copy per group
    d. MMIC IPA 4-2: *El Salvador-China-US Cross-cultural Comparisons*, one copy per student
- MMIC IPA 3-4/4-1: *Presentational (Written) Scoring Rubric* (teacher evaluation)
- MMIC IPA 4-4: *Interpersonal Scoring Rubric* (teacher evaluation)
- MMIC IPA 4-3: *Interpersonal Tasks,* Teacher Guide
- MMIC IPA 4-3c: Laminated cards (Part 1)
    a. one card for Scientific Method
    b. one card for Engineering Design Process
    c. one card with name of each step of scientific method
    d. one card with name of each step of engineering design process
- Two envelopes with question strips (Part 2)
    a. MMIC IPA 4-3a: *Juan Daniel* Story Reflection Task
    b. MMIC IPA 4-3b: Cross-cultural Comparison Task
- Video/audio recorder, video/audio tape
- Cross-cultural chart
- Any/all previous handouts, rubrics, and notes that students may find relevant to revising their final emails

© 2012 Fortune, T., Wieland, M., and MMIC Team

IPA ACTIVITIES

Preview Phase—"Into" activity

Through two interactive activities, students will analyze, compare and contrast various aspects of Salvadoran, Chinese and US culture. Using these interactive activities the teacher will call explicit attention to effective use of communication strategies as preparation for Interpersonal Tasks 1-2.

Time: 60 minutes

Interpersonal Task Activity 1

1. Display page 1 of MMIC IPA 4-IWB and ask student to use the IPA graphic overview to identify what parts are completed and what parts still remain for the class to do.
2. Begin the final part of the IPA by referring to the cross-cultural chart that the class has been compiling throughout the unit (page 2 of MMIC IPA 4-IWB).
3. Display page 3 of IWB, the handout of MMIC 4-2: *El Salvador-China-US Cross-cultural Comparisons* to facilitate a discussion about similarities and differences among China, El Salvador and US. Making reference to the triple Venn diagram (China, US, El Salvador) ask students to consider what all three cultures have in common. Then ask them where on the diagram is the best place to write those ideas. Allow time for example connections.
4. Repeat this cycle of questions asking what two of the three cultures share in common, e.g., El Salvador and US, China and US, etc.
5. Ask students to name cultural places/practices/products that are distinct and belong to just one particular culture. Have a student show you where that information belongs on the triple Venn diagram.
6. Draw students attention to the triple Venn diagrams displayed around the room. Each posted piece of flipchart paper will be numbered and titled with one of the cross-cultural categories that was introduced during the course of this unit, for example, sports, food, cities, display of solidarity, etc.

Note: *It may be helpful to have students color-code overlapping areas, for example, yellow for all 3 cultures have in common, green for 2 of 3 cultures have in common, blue for 1.*

7. Tell students that as a class they will play the game, "Chattanooga ChooChoo." Display pages 4-6 of MMIC IPA 4-IWB as you introduce the game. In this game students will travel around the room, stopping at each "train station" (flipchart poster paper) to read, "chat" and then write and/or draw any additional items and ideas that represent similarities and differences among the three cultures. When they hear the train whistle or the conductor's call, it's time for everyone to move to the next station.
8. With the whole class discuss what it looks and sounds like when students are engaged in an effective interpersonal communication. Record student responses on page 7 of MMIC IPA 4-IWB.

© 2012 Fortune, T., Wieland, M., and MMIC Team

9. Display page 8 of MMIC IPA 4-IWB, the list of Communication Strategies descriptors for MMIC IPA 4-4, the interpersonal scoring rubric. Make sure to draw student awareness to each of the behaviors as preparation for the interpersonal task assessment.
10. Model doing this activity at the "Sports" station on page 9 of IWB while interacting with the class. Ask students to pay attention to the communication strategies that are used during this interaction.
11. Debrief the use of communication strategies with the whole class once the modeling has ended and use page 10 of IWB to collaboratively assign a rating between 1-4 for each criterion. Tell students that their use of these same communication strategies will be evaluated during the interpersonal task assessment and they will now have a chance to practice using them in this next activity.
12. Prepare students for the "Chattanooga ChooChoo" activity (page 11 of MMIC IPA 4-IWB):
    a. Tell students that every group needs to bring a marker for recording ideas and remind them to take turns being the reader/recorder.
    b. When one student is speaking, the others must remain completely silent and listen. Encourage them to make effective use of the communication strategies.
    c. Briefly review targeted language functions-forms-vocabulary that you expect students to use during this activity (pages 12-15 of IWB).
13. Guide students through the "Chattanooga ChooChoo" activity:
    a. Have students "number off" to form as many groups as there are cross-cultural categories. **Note**: It may be helpful to guide "all students who are number 1" to poster #1, "number 2" to poster #2 (clockwise to "number 1"), and so forth, so that small groups of students will easily be able to travel around to other posters without causing congestion. Ideally, 2 or 3 students will be in each group so that students can take turns with 1) reading what is already on the poster aloud, and 2) recording new items and ideas.
    b. Allow students approximately 1-2 minutes at each flipchart station to read aloud, "chat" "谈谈" about and record ideas about similarities and differences among Chinese, Salvadoran, and US cultures. Closely monitor groups' use of their time.
    c. When it is time to move to the next station, call out either with a train whistle or by saying "大家都上车！ 火车要开到下一站了！ "(All aboard! This train is leaving for the next station!) Rotate groups around the room, until all students have stopped at each station and discussed all categories.

© 2012 Fortune, T., Wieland, M., and MMIC Team

Interpersonal Task Activity 2

Time: 30 minutes

1. Draw attention again to the communication strategies displayed on page 16 of MMIC IPA 4-IWB. Invite students to discuss their use of these strategies during the last activity.
2. Return student attention to the cross-cultural categories still posted around the room. Allow students time to look over the completed Venn diagrams at the various stations.
3. Distribute MMIC 4-2: *El Salvador-China-US Cross-Cultural Comparisons*, one per student. Using the interactive whiteboard (page 17), allow students to assist in filling out a large displayed triple Venn diagram. Ask students to complete their own handouts at the same time. This final triple Venn diagram will represent all categories at one time, or the teacher may choose to have students fill out several diagrams—one for each category.
4. Finally, in pairs, have students co-construct a few sentences that compare and contrast the three cultures (see page 18 of IWB for a few model sentence scaffolds). Invite a few pairs to read their sentences aloud.

© 2012 Fortune, T., Wieland, M., and MMIC Team

Language Function-Form-Vocabulary Connections (Activity 1-2)		
CO IPA 4.1-2.1	**State or identify attributes of something/someone using a predicative construction with the main noun modified by a relative clause**	
Approaching	**Attaining**	**Expanding**
中国人和萨尔瓦多人吃东西一样/吃一样的东西。 Chinese and Salvadoran eat things in the same way/ eat the same things.	中国人和萨尔瓦多人吃的东西很相似。 The things that Chinese and Salvadoran people eat are very similar.	中国人，美国人和萨尔瓦人多人都爱踢球。 Chinese, Americans and Salvadoran all love playing soccer.
Noun phrase [noun phrase (A and B)] + verb + object + 一样 as adverb OR 一样 as adjective + 的 + noun.	Modifying noun phrase [noun phrase (A and B)/ (A, B and C) + verb + 的] + main noun (omitted "be" verb) + intensifier + adjective	Modified noun phrase (A, B and C) + verb + direct object

Form focus

1. Use of modifying noun phrase to describe main noun

One way to modify a noun is with a modifying noun phrase. A modifying phrase can be a relative clause: a nominalized clause placed in front of the noun.
For example,
中国人 (A) 和 (and) 萨尔瓦多人 (B) 吃 (verb, to eat) 的 (nominalization) 东西 (main noun): "Modifying noun phrase [noun phrase (A and B) + verb + 的] + main noun" construction that means "the things that Chinese and Salvadoran people eat."

2. Use of verb phrase or relative clause to describe main noun

There are several ways to describe persons/places/things. One way is to use a verb phrase and tell what the person/thing does. For example,
蜥蜴和青蛙一起住。 A lizard and a frog live together.
前锋 + 射门得分。A forward kicks the ball and scores goals.
水瓶 + 盛水。 A water bottle carries water.

Another way to describe something/someone is to use a relative clause: a nominalized verb + object + 的 clause placed in front of the noun being modified.
For example,
蜥蜴和青蛙住的 + 地方- The places that a lizard and a frog live in…
一个**设计科技的** +人 - "someone who designs technology"
设计宇宙飞船的 + 航空工程师 – "An aerospace engineer who designs spaceships"

A third way to describe someone/something is to use the predicative adjective "Subj. + ("be" Verb 是 understood) + adjective" construction either by itself or in combination with a relative clause.

© 2012 Fortune, T., Wieland, M., and MMIC Team
Engineering is Elementary® "Model Membrane" Unit

An example of the latter is,
蜥蜴和青蛙住的地方很相似。 The places that a lizard and a frog live in are very similar.

CO IPA 4.1-2.2	**Identify similarities and differences between two things using topic as noun/verb phrase at sentence beginning**	
Approaching	**Attaining**	**Expanding**
中国和/跟萨尔瓦多的食物一样/不一样。 Chinese and Salvadoran foods are the same/different.	人们喜欢的运动，在中国和在美国很相似/不同。 The sports people enjoy in China are similar to/different from the sports people enjoy in the U.S.	人们喜欢的运动，在中国和在美国大同小异/大相径庭。 The sports people enjoy in China are generally the same but little bit different from/ dramatically different from the sports people enjoy in the U.S.
A + 和/跟 (and) + B + 一样 (same)/不一样 (different)	Topic as noun phrase ("modifying phrase [noun + verb] + 的+ main noun + ,) + sentence (在+ Country A and 在+ Country B + [是 assumed] intensifier + adj.).	Topic as noun phrase ("modifying phrase [noun + verb] + 的+ main noun + ,) sentence (在+ Country A and 在+ Country B + [是 assumed] + four-character idiomatic expressions.

Form focus: Topic as noun/verb phrase at sentence beginning

In Mandarin, expressing the topic (what the sentence is about) is very important. The topic usually refers to something that the speaker and hearer already know about. The topic of the sentence does not need to have a direct relationship with the main verb as would a subject.

The topic or that which is being discussed is usually placed at the beginning of the sentence and set off by a comma. It can be either a noun phrase or a verb phrase.

For example,
Noun phrase: 人们喜欢的运动，在中国和在美国很相似/不同。(The sports people enjoy in China are similar to/different from the sports people enjoy in the U.S.)
Verb phrase: 运用工程设计步骤，工程师们需要遵循这些步骤。(Using the engineering design process, engineers need to follow these steps.)

Noticing and awareness spotlight

1. Use of "noun + 的 + noun" to express possession

To indicate ownership/possession, the structure is "noun + 的 + noun", for example, 中国**的**食物 means China's food or Chinese food.

© 2012 Fortune, T., Wieland, M., and MMIC Team

2. Use of four-character idiomatic expressions
Four-character idiomatic expressions are commonly used phrases that carry a great of meaning beyond the four characters themselves. They have their origins in traditional Chinese stories, myths and historical facts and are best understood within these contexts. There are about 5,000 such expressions in use. A few commonly used four-character idiomatic expressions that can be found in ***Juan Daniel's Fútbol Frog*** are: 小心翼翼 (very carefully) 一泄千尺 (fall down one thousand feet, fall far down, cascade down) To pique student curiosity about these idiomatic expressions, teachers will need to research their origins and discuss the historical context with students.

CO **IPA 4.1-2.3**	**Give emphasis to the specific direct object by using 把 or 让/使 construction and placing the direct object before the verb**	
Approaching	**Attaining**	**Expanding**
中国人和萨尔瓦多人吃东西一样/吃一样的东西。 Chinese and Salvadoran eat things in the same way/ eat the same things.	中国、萨尔瓦多和美国在…上有共同点，因此，我们**把**这个想法放/写在这个部分。 China, El Salvador and the U.S. have … in common, as a result, we put/wrote our ideas in this section.	由于…，因此，我们**把**这个想法放/写在这三个圆形的中间。 Due to …, as a result we put/wrote our ideas in the center of these three circles.
simple SVO (Subj-verb-direct object)	Subj +把 + direct object noun phrase + verb + locative phrase	Subj +把 + direct object noun phrase + verb + locative phrase
"食物"，写在这里！ "Food," write it here!	**把**"食物"写在这里! Write "food" here!	**把**"踢足球"写在这三个圆形的中间! Write "play soccer" in the center of these three circles!
Topic, verb + locative phrase (在 zai + adv. of location)	把-construction (把 + direct object noun phrase + verb) + locative phrase (在 zai + adv. of location)	把-construction (把 + direct object noun phrase + verb) + locative phrase (在zai + modified noun phrase)
Form focus		
1. Use of 把-construction vs. simple SVO (Subj-verb-direct object)		
A把-construction (including 把 + direct object + verb + complement) will typically reference something specific that the speaker thinks the hearer knows about, not something unknown to the hearer.		

© 2012 Fortune, T., Wieland, M., and MMIC Team
Engineering is Elementary® "Model Membrane" Unit

If a sentence *communicates something that happens to the direct object*, then use of the把-construction is appropriate.
For example,

- Juan Daniel**把**球踢进了。 (Subj +把 + direct object noun phrase + verb + directional complement + past tense marker.) Juan Daniel kicked the soccer ball in.
- 我们**把**这个想法放/写在这个部分。 (Subj +把 + direct object noun phrase + verb + locative complement.) We wrote/put our ideas in this section.

However, if there is *no additional information given as to what has happened to the direct object*, use of a把-construction is incorrect. For example, in the sentence below, the把-construction is not allowed:
Juan Daniel 想他的青蛙。(Subj. + verb + direct object noun phrase) Juan Daniel misses his frog.

2. Different uses of 把

1. 把 as a classifier: 一把椅子 (a chair)
2. 把-construction: 把 allows one to place the direct object in front of the main verb

Many Mandarin words can function as more than one part of speech
For example,
吃东西**一样** : **一样** functions as an adverb meaning "in the same way"
吃**一样的**东西 : **一样** functions as an adjective modifying the noun东西 and means "same"

CO IPA 4.1-2.4	**Express location using 在 [zài] in a locative phrase**	
Approaching	**Attaining**	**Expanding**
在这儿 (here [vernacular]) **在**这里 (here, this place) **在**那儿 (there [vernacular]) **在**那里 (there, that place) **在**家 (home) **在**饭馆儿 (restaurant) **在**足球场 (soccer field) **在**这个部分 (this section)	**在**…前边/面/头 (in front of) **在**…后边/面/头 (behind) **在**…上边/面/头 (above) **在**…下边/面/头 (below) **在**…里边/面/头 (inside) **在**…外边/面/头 (outside)	**在这两个部分的中间** (in the center of these two sections/parts/areas) **在又热又干燥的**足球场**上** (on the hot, dry soccer field)
在 (zài) + adverb of location (here, there)/noun (home, restaurant, soccer field, country)	在 (zài) + noun + locative particle	在 (zài) + modifying phrase + 的 + noun OR 在 (zài) + modifying phrase + 的 + noun + locative particle

© 2012 Fortune, T., Wieland, M., and MMIC Team
Engineering is Elementary® "Model Membrane" Unit

Form focus
1. Use and placement of "在 zài+ abstract noun +上 shàng"
"在 zài + abstract noun + 上 shàng" meaning "regarding," "on," "speaking of" For example, • 在这个问题上： on this issue/problem • 在吃的东西上： speaking of food (things people eat) • 在团队精神上： speaking of solidarity
2. Formation of locative phrase: "在 (zài) + noun + locative particle"
To express location Chinese speakers use a locative phrase that begins with the coverb 在 (zài). For example, "在 zai + concrete noun + locative particle" **在**守门员**后面**： behind the goalie **在**足球场**上**： on the soccer field To provide more detail within a locative phrase, we can add a modifying phrase, for example, "在 (zài) + modifying phrase + (的) + noun (+ locative particle)." There are a few different ways to construct a modifying phrase: 1. Adj + **的**: For example, **在又热又干燥的**足球场**上** (on the hot, dry soccer field) 2. Noun phrase +**的：在这两个部分的中间** (in the center of these two sections)
3. Placement of locative phrase
Unlike in English, a locative phrase is placed either at the beginning of the sentence or before the main verb, NOT at the end of the sentence. A locative phrase, e.g., "在 zai + concrete noun +locative particle," can be placed in a sentence as follows: 1. Directly before the main verb. (Typical placement) 中国、萨尔瓦多和美国**在团队精神上**有共同点 China, El Salvador and the U.S. have many in common in the solidarity area. 我们**在咖啡过滤纸上**放了一块海绵。We put a sponge on the coffee filter. (Subj + locative phrase + verb + past tense marker + object.) 2. At the beginning of the sentence and set off by a comma. (for emphasis) **在咖啡过滤纸上**，我们放了一块海绵 。On the coffee filter, we put a sponge. (Locative phrase, subj + verb + past tense marker + object.) 3. After main verb in a 把-construction (giving emphasis to the direct object) 我们把一块海绵放**在咖啡过滤纸上**了 。We placed a sponge on the coffee filter. (Subj + 把-construction [把 + object + verb + complement] + past tense marker.)

© 2012 Fortune, T., Wieland, M., and MMIC Team
Engineering is Elementary® "Model Membrane" Unit

Noticing and awareness spotlight: Use of suffixes 边、面、头
Locative particles such as 前 (in front of) and 后 (behind) will typically be used with one of the following suffixes: 边 (-bian)、面 (-mian)、头 (-tou) and become, for example, **前边/面/头**. The following adverbs of location can be used interchangeably: 这儿 (here [vernacular]); 这里 (here, this place) 那儿 (there [vernacular]); 那里 (there, that place)

CO IPA 4.1-2.5	**Support ideas/opinions using compound sentences with adverb 因此**	
Approaching	**Attaining**	**Expanding**
我们写…., **因为**中国和萨尔瓦多有共同点/没有共同点。 We wrote …, because China and El Salvador have/do not have this in common.	中国、萨尔瓦多和美国在…上有共同点，**因此**，我们把这个想法放/写在这个部分。 China, El Salvador and the U.S. have … in common, as a result, we put/wrote our ideas in this section.	**由于**…，**因此**，我们把这个想法放/写在这个部分。 Due to …, as a result we put/wrote our ideas in this section.
....., 因为 (because)…… 因为 (because)……, 所以 (so) + simple SVO (Subj-verb-direct object)	……，因此 (as a result, therefore), subj +把 + direct object noun phrase + verb + locative complement	由于 (due to)……, 因此 (as a result, therefore), subj +把 + direct object noun phrase + verb + locative complement
Form focus		
1. ……，因此 (as a result, therefore), ……		
因此 (as a result, therefore) is an adverb that can be used instead of the conjunction 因为 in the second clause. Emphasis is given by setting the adverb off with a comma.		
2. Use of 把-construction vs. simple SVO (Subj-verb-direct object)		
A 把-construction (including 把 + direct object + verb + complement) will typically reference something specific that the speaker thinks the hearer knows about, not something unknown to the hearer. If a sentence *communicates something that happens to the direct object*, then use of the 把-construction is appropriate. For example, • Juan Daniel **把**球踢进了。 (Subj +把 + direct object noun phrase + verb + directional complement + past tense marker.) Juan Daniel kicked the soccer ball in.		

© 2012 Fortune, T., Wieland, M., and MMIC Team

- 我们**把**这个想法放/写在这个部分。 (Subj +把 + direct object noun phrase + verb + locative complement.) We wrote/put our ideas in this section.

However, if there is *no additional information given as to what has happened to the direct object*, use of a 把-construction is incorrect. For example, in the sentence below, the 把-construction is not allowed:
Juan Daniel 想他的青蛙。(Subj. + verb + direct object noun phrase) Juan Daniel misses his frog.

Noticing and awareness spotlight

1. Use of 由于 (due to)

"由于 (due to)……, 因此 (as a result, therefore), ……" reflects a more formal register and is more likely to be used in written communication.

2. Use and placement of "在 zài+ abstract noun +上 shàng"

"在 zài + abstract noun + 上 shàng" meaning "regarding," "on," "speaking of"
For example,

- 在这个问题上: on this issue/problem
- 在吃的东西上: speaking of food (things people eat)

3. The negation of 有 (have) is 没有 (méi yǒu)

The negative particle 没 (méi), not 不 (bù), must be used to negate 有 (yǒu) [have].
For example,
有共同点 (have in common)
没有共同点 (not have in common)
没 can be used by itself to express 没有 (méi yǒu). If 没 is used by itself, 有 is assumed such that 没 = 没有.

CO IPA 4.1-2.6	**Construct characters to form words and phrases adhering to character structure rules and stroke order guidelines**

For example:
Left-right: 叫、场
Top-bottom: 吉、只
Left, middle, right: 树、谁
Top, middle, bottom: 复、常
One-part, totally enclosed: 国、回
Partially enclosed: 用，原

© 2012 Fortune, T., Wieland, M., and MMIC Team

Approaching	Attaining	Expanding
One- and two-part characters One-part character 我、生 One-part, totally enclosed 国、回 Two-part characters Left-right: 叫、场 Top-bottom: 吉、只	**Three-part characters** Left, middle, right: 树、谁 Top, middle, bottom: 复、常 Left, top-right, bottom-right: 锋、纷 Top-left, bottom-left, right: 部、剂、劲 Left-top, right-top, bottom: 然、赞 Top, left-bottom, right-top: 死、前	**Four + part characters** Left-top, right-top, left-bottom, right bottom: 能、舒 Left, top-right, middle-right, bottom-right: 慢、镜 Left, middle, top-right, bottom-right: 游 Left, middle-top, middle-bottom, right: 湖

Form focus: Formation of Chinese characters

1. Character structure rules

Chinese characters are called “square” characters because no matter how simple or complex, each character fits inside a square. Characters can usually be divided into different parts. These parts form character structures. There are four main structures: one-part structure, two-part structure, three-part structure, and four-part structure. These structures can be further divided into sub-parts.

For example,

Two-part structures: (top/bottom), (left/right)

Three-part structures: (left, top-right, bottom-right), (top-left, bottom-left, right), etc.

2. Stroke order guidelines

General rules for writing Chinese characters are:

1. Horizontal first, then vertical.
2. Top first, then bottom.
3. Left first, then right.
4. Left-slanted first, then right-slanted.
5. Outside first, then inside.
6. Center first, then both sides.
7. With “closed” characters, enter character first, then close it up.

© 2012 Fortune, T., Wieland, M., and MMIC Team

CO **IPA 4.1-2.7**	**Use a developing understanding of basic units of word formation in Chinese to infer and construct meaning with written text**
Form focus: radical → character → compound/word	
1. radical	
A radical is the smallest meaningful orthographic unit in compound characters, for example, 虫 (insect) is used in the character 蛙 (frog). 虫 (insect) can also be a stand-alone character. There are three types of radicals: semantic (give information about character meaning) [手 (hand)], phonetic (give information about character pronunciation) [分 (fen) in the compound 纷 (one after another)], and perceptual (do not give information about character meaning or pronunciation, instead function as visual fillers) [此 (this, these in classical Chinese), however, in the compound 嘴 (mouth) the radical 此 functions as a perceptual radical providing information about neither meaning nor pronunciation].	
2. character	
A Chinese character is a meaningful orthographic unit that is always pronounced as one syllable. Chinese characters have evolved as a writing system over millennia and have developed in various ways. Some characters are **pictographs** that were originally drawings of concrete objects, for example, 雨 (rain), the four dots depicting the rain coming down from the sky; others are better described as **ideographs** because they were created as graphic representations of more abstract ideas such as the notion of "above", 上, the stroke above the horizontal line indicating the idea of "above" or "up." Another way to create characters was to combine two or more pictographs or ideographs to portray a new meaning, for example, 休 (to rest), a combination of the pictographs for person, 人, and a person leaning against a tree, 木. These types of characters are referred to as **ideogrammatic characters**. Over 90% of Chinese characters were created as **phono-semantic compound characters** and are made up of a combination of semantic and phonetic radicals. For example，控 (to control), the semantic radical on the left side,手 (hand) , indicates that the word meaning will include an action with a hand, and the phonetic radical on the right side 空 (kōng), helps the reader with character pronunciation "kòng."	
3. compound	
Compounds consist of at least two characters, neither of which is an affix, a character that on its own lacks meaning but when added to other characters becomes a meaningful unit. Most Chinese words are compounds. Compounds have various types of syntactic relationships. A few compound types: *Verb-Object:* 踢足球 (to kick soccer ball)、开球 (to kick of)、发誓 (to pledge) *Verb-Complement*: 摔倒 (to fall down)、改进 (to improve and get better)、进来 (to come in) *Subject-Predicate*: 天亮 (bright [sky is bright]) *Number-Classifier*: 各种 (various kinds)、一道 (a ray of…)、一片 (a patch of…)	

© 2012 Fortune, T., Wieland, M., and MMIC Team

Adverb-Verb: 慢跑 (to jog [to run slowly])、快走 (to hurry [to walk fast]) *Verb-Verb-Noun*: 栖息地 (habitat [to stay and rest at a place]) *Adjective-Adjective-Noun*: 浅桃色 (light peach color)、吉祥物 (mascot [happy and auspicious object])

CC **IPA 4.1-2.8**	**Express a personal opinion**	
Approaching	**Attaining**	**Expanding**
我觉得／想…… I feel like/think… 也许/可能…… Maybe/ Perhaps…	在我看来…… It seems to me like… 对我来说，…… In my opinion, … 我认为…… I believe/think …	我建议…… I suggest… 我的看法是…… My thoughts are… 我是说…… What I mean is…

CC **IPA 4.1-2.9**	**Express agreement/disagreement**	
Approaching	**Attaining**	**Expanding**
好。 Good. 我同意。 I agree. 我也是／同意。 I also + verb (am/agree). 对。 Exactly/Correct.	你说得对。 You are correct. 你完全正确。 You're absolutely right. 我也是这么认为的。 I think so too. 我也不这么认为。 I don't think so either.	我的想法跟你的一样。 I share your thoughts. 我赞成。 I agree (more formal). 我完全赞同。 I agree with you entirely.
不。 No. 不好。 Not good。 不同意。 I don't agree with you.	我不是这么认为的。 I don't think so. 是，可是你不觉得……? Yes, but don't you think… 我觉得我不同意。 I'm afraid I have to disagree。	我的意见跟你的不同。 My suggestions are different from yours. 我想和你讨论讨论…… I must take issue with you on that.

© 2012 Fortune, T., Wieland, M., and MMIC Team

不对。 Not exactly.		然而 However
Noticing and awareness spotlight		
1. Repetition of verb		
Repetition of a verb, e.g., 讨论讨论 (to discuss), can be used to soften the tone of voice.		
2. Use of 吗？ 吧？ 呢？		
A few particles are commonly used at the end of questions. 吧？ is used to invite agreement. 呢？ is a tag question meaning “, and you?” 吗？ is a question particle that is used when one expects a “yes” or “no” response.		

CC IPA 4.1-2.10	**Negotiate to reach consensus**	
Approaching	**Attaining**	**Expanding**
好吧。 OK. 我同意。 I agree.	我同意你的想法。 I agree with your idea. 我也一样。 Same here.	不约而同。 We reach the consensus without consulting with each other.

CC IPA 4.1-2.11	**Ask for clarification about feedback/advice/idea**	
For example:		
Approaching	**Attaining**	**Expanding**
你说什么？ What did you say? 我不懂。 I didn’t understand that. 什么意思？ What does it mean?	我没听懂，请你再说一次。 I didn’t understand, could you please say it again? 你是不是说…… Did you say… 你说的是……的意思吗？ Does what you said mean…?	你可不可以重复一遍？ Could you repeat it one more time? 请你再跟我讲一讲。 Please explain it to me one more time. 你可以给我解释一下吗？ Could you explain that to me?

© 2012 Fortune, T., Wieland, M., and MMIC Team

Form focus: Nominalization using 的 (e.g., 你说的是……)
A verb/verb phrase can become a noun by placing the particle 的 (de) after it. For example, the verb phrase 你说 (you say) can function as a noun phrase 你说的, meaning "what you say" in 你说的是 (What you say is…).

CC IPA 4.1-2.12	**Negotiate turn-taking**	
For example:		
Approaching	**Attaining**	**Expanding**
该我了! My turn! 到你了! Your turn! 下一个是谁? Who's next? 下一个是你吗? Are you the next one?	下一个该轮到谁了? Who is the next? 我觉得该你了。 I think it's your turn. 我在等你呢! I am waiting for you!	如果你不赶紧，我都不能往下进行。 If you don't hurry, none of us can move on to the next.

© 2012 Fortune, T., Wieland, M., and MMIC Team

Focused Assessment Phase—"Through" activities

Student pairs will complete the interpersonal portion of the IPA during which time student working groups will complete final email drafts of the presentational (written) portion of the IPA.

Time: 30-45 minutes

Logistics

Interpersonal Performance Tasks 1 and 2 will take about 5 minutes (total) for each student pair. Allow transition time in between each pair to complete the scoring rubric. To promote balanced conversations, pair students in advance with others who have a similar level of proficiency and who are comfortable speaking with one another. Students can do this assessment while the rest of the class works on final email drafts. It is strongly recommended that the teacher enlist a teaching assistant to help students with their writing during this time.

Interpersonal Task (Part 1 and 2) Activity 3

1. Draw students' attention to the IPA poster (page 19 of IWB) and ask which task has not yet been completed. Draw attention to the word "interpersonal." Ask students to talk with a neighbor about what they think this word might mean (page 20 of IWB). Call on student pairs, asking them to discuss their ideas and how they arrived at these ideas.
2. Describe what students will do during the final portion of this IPA (page 21 of IWB): Students will finish revising and editing email drafts and create the final version of their group's email to the visiting engineer (Presentational (written) task). While students are working on the final emails, student pairs will be called up to talk with one another (interpersonally) and complete the interpersonal tasks.
3. Tell the students that it is important that they not talk about what they discuss during the interpersonal tasks with their classmates after they have finished it.
4. With student groups sitting together, return both teacher and student rubrics, checklists and rough drafts of engineer emails. If necessary, briefly discuss any common issues or questions that may have arisen during review of these materials.
5. Refer to MMIC IPA 4-3: *Interpersonal Tasks, Teacher Guide*. Use this guide to facilitate student interaction during both interpersonal tasks.
6. Make sure that, by the time student pair interviews are finished, final versions of emails are also finished and turned in.

Note: *Videotape and/or audiotape the interpersonal performance assessments as a record of students' speaking proficiency. This will serve as an excellent sample of student work that can be reviewed by students, as well as shared with family members.*

© 2012 Fortune, T., Wieland, M., and MMIC Team

Language Function-Form-Vocabulary Connections (Activity 3)		
CO IPA 4.3.1	**Ask and answer questions using question words**	
For example:		
Approaching	**Attaining**	**Expanding**
…… 吗? Use of ma …… 是不是……? Is or is not?	谁……? (Who) 什么……? (What) 哪里……? (Where) 什么时候……? (When) 怎么……? (How) 为什么……? (Why)	几/多少? (How many) 哪(些)……? (Which)
Form focus: Placement of question words		
Most question words in English occur at the beginning of a sentence. However, question words in Chinese occur in a variety of positions. Generally, question words appear in the same position as the grammatical function they serve in the sentence. For example: 它的首都是**什么**? (What is the capital city? ["What" occurs in predicate position]) 萨尔瓦多的 北边有**几个国家**? (How many countries are north of El Salvador? ["How many" is in the # position of the noun phrase [# + classifier + noun])		
Noticing and awareness spotlight: Use of 吗? 吧? 呢?		
A few particles are commonly used at the end of questions. 吧? is used to invite agreement. 呢? is a tag question meaning ", and you?" 吗? is a question particle that is used when one expects a "yes" or "no" response.		

CO IPA 4.3.2	**Give emphasis to the specific direct object by using 把 or 让/使 construction and placing the direct object before the verb**	
Approaching	**Attaining**	**Expanding**
我放这个在这里。 I put this here.	提问是第一个步骤，**因此**，我把它放在里。 Ask question is the first step, as a result, I put it here.	由于提问是第一个步骤，因此，我把它放在最前面。 Due to "Ask question" is the first step, as a result I put it in the front.
simple SVO (Subj-verb-direct object)	Subj +把 + direct object noun phrase + verb + locative phrase	Subj +把 + direct object noun phrase + verb + locative phrase

© 2012 Fortune, T., Wieland, M., and MMIC Team

放在这里！	**把**“设计”放在这里!	**把**“设计”放在这两张卡片的中间!
Put it here!	Put “Plan design” here!	Put “ Plan design” in between of these two cards!
Topic, verb + locative phrase (在 zai + adv. of location)	把-construction (把 + direct object noun phrase + verb) + locative phrase (在 zai + adv. of location)	把-construction (把 + direct object noun phrase + verb) + locative phrase (在zai + modified noun phrase)

Form focus

1. Use of 把-construction vs. simple SVO (Subj-verb-direct object)

A把-construction (including 把 + direct object + verb + complement) will typically reference something specific that the speaker thinks the hearer knows about, not something unknown to the hearer.

If a sentence *communicates something that happens to the direct object*, then use of the把-construction is appropriate.
For example,

- Juan Daniel**把**球踢进了。 (Subj +把 + direct object noun phrase + verb + directional complement + past tense marker.) Juan Daniel kicked the soccer ball in.

- 我们**把**这个想法放/写在这个部分。 (Subj +把 + direct object noun phrase + verb + locative complement.) We wrote/put our ideas in this section.

However, if there is *no additional information given as to what has happened to the direct object*, use of a把-construction is incorrect. For example, in the sentence below, the把-construction is not allowed:
Juan Daniel 想他的青蛙。(Subj. + verb + direct object noun phrase) Juan Daniel misses his frog.

2. Different uses of 把

1. 把 as a classifier: 一把椅子 (a chair)
2. 把-construction: 把 allows one to place the direct object in front of the main verb

Many Mandarin words can function as more than one part of speech
For example,
吃东西**一样** : **一样** functions as an adverb meaning “in the same way”
吃**一样的**东西 : **一样** functions as an adjective modifying the noun东西 and means “same”

© 2012 Fortune, T., Wieland, M., and MMIC Team

CO IPA 4.3.3	**Express location using 在 [zài] in a locative phrase**	
Approaching	**Attaining**	**Expanding**
在这儿 (here [vernacular]) **在**这里 (here, this place) **在**那儿 (there [vernacular]) **在**那里 (there, that place) **在**家 (home) **在**饭馆儿 (restaurant) **在**足球场 (soccer field) **在**这个部分 (this section)	**在**…前边/面/头 (in front of) **在**…后边/面/头 (behind) **在**…上边/面/头 (above) **在**…下边/面/头 (below) **在**…里边/面/头 (inside) **在**…外边/面/头 (outside)	**在这两个部分的中间** (in the center of these two sections/parts/areas) **在又热又干燥的**足球场**上** (on the hot, dry soccer field)
我觉得……放在这儿/里，好不好?	我觉得……应该放在正文前边/上面/下头，你同意吗?	我看把这个部分放在第一章/段/页比较好，你说呢?
I think … goes here/there, right?	I think … should be placed in front of/above/below the body, do you agree?	I think it's better to put this part in the first chapter/paragraph /page, what do you say?
I think … should + 放 (be placed, put) + "在 (zài) + 这儿/里／ (here/there)", tag question?	I think … should + 放 (be placed, put) + "在 (zài) + noun phrase + locative particle", tag question?	I think + 把-structure [把 + object + 放 (to put) + 在 (zài) + adverbs of location] + 比较好 (relatively better), tag question?

Form focus

1. Use and placement of "在 zài+ abstract noun +上 shàng"

"在 zài + abstract noun + 上 shàng" meaning "regarding," "on," "speaking of"
For example,

- 在这个问题上： on this issue/problem
- 在吃的东西上： speaking of food (things people eat)
- 在团队精神上：speaking of solidarity

2. Formation of locative phrase: "在 (zài) + noun + locative particle"

To express location Chinese speakers use a locative phrase that begins with the coverb 在 (zài). For example, "在 zai + concrete noun + locative particle"

在守门员**后面**： behind the goalie
在足球场**上**：on the soccer field

To provide more detail within a locative phrase, we can add a modifying phrase, for example, "在 (zài) + modifying phrase + (的) + noun (+ locative particle)."

© 2012 Fortune, T., Wieland, M., and MMIC Team

There are a few different ways to construct a modifying phrase:

- Adj + **的**: For example, **在又热又干燥的**足球场**上** (on the hot, dry soccer field)
- Noun phrase +**的**: **在这两个部分的中间** (in the center of these two sections)

3. Placement of locative phrase

Unlike in English, a locative phrase is placed either at the beginning of the sentence or before the main verb, NOT at the end of the sentence.

A locative phrase, e.g., "在 zai + concrete noun +locative particle," can be placed in a sentence as follows:

1. Directly before the main verb. (Typical placement)
   中国、萨尔瓦多和美国**在团队精神上**有共同点 China, El Salvador and the U.S. have many in common in the solidarity area.
   我们**在咖啡过滤纸上**放了一块海绵。We put a sponge on the coffee filter.
   (Subj + locative phrase + verb + past tense marker + object.)
2. At the beginning of the sentence and set off by a comma. (for emphasis)
   在咖啡过滤纸上，我们放了一块海绵。On the coffee filter, we put a sponge.
   (Locative phrase, subj + verb + past tense marker + object.)
3. After main verb in a 把-construction (giving emphasis to the direct object)
   我们把一块海绵放**在咖啡过滤纸上**了。We placed a sponge on the coffee filter.
   (Subj + 把-construction [把 + object + verb + complement] + past tense marker.)

Noticing and awareness spotlight: Use of suffixes 边、面、头

Locative particles such as 前 (in front of) and 后 (behind) will typically be used with one of the following suffixes: 边 (-bian)、面 (-mian)、头 (-tou) and become, for example, **前边/面/头**.

The following adverbs of location can be used interchangeably:

这儿 (here [vernacular]); 这里 (here, this place)
那儿 (there [vernacular]); 那里 (there, that place)

CO IPA 4.3.4	**Recount events in simple past time using action verbs with 了 (temporal marker) and dependent time phrase/clause in complex sentence**

For example:

Approaching	**Attaining**	**Expanding**
Juan Daniel 跟朋友一起去踢球**了**。	足球比赛的时候，José Eduardo 把 Juan Daniel 推倒**了**，Juan Daniel 的胳膊受伤**了**。	正当 Juan Daniel 鼓足劲儿要出脚的时候，突然有人用力地推**了**一下他的肩膀。

© 2012 Fortune, T., Wieland, M., and MMIC Team
Engineering is Elementary® "Model Membrane" Unit

Juan Daniel went to play soccer with his friends.	While at the soccer game José Eduardo pushed Juan Daniel down and Juan Daniel's arm was hurt.	When Juan Daniel was about to kick the soccer ball, someone shoved his shoulder hard.
Simple past time using action verb with temporal marker 了	Use of dependent time phrase in complex sentence and temporal marker 了	Use of dependent time clause in complex sentence and temporal marker 了

Form focus

1. Use of 了 as temporal marker

Simple past time can be communicated using 了 (temporal marker), e.g., action verb + 了 (temporal marker). The temporal marker "了" is positioned either immediately after the main verb or at the end of the sentence/clause.

2. Use of dependent time phrase/clause in complex sentence

Mandarin uses prepositions as linking words to connect two clauses and form one complex sentence. When the first clause is dependent on the second clause to complete its meaning, prepositions will be placed at the end of the first clause. The first clause may consist of a time phrase [noun + preposition] (e.g., 足球比赛的时候, ……) or a time clause [simple SVO sentence + preposition] (e.g., 正当他鼓足劲儿要出脚的时候, ……).

For example,
Noun/simple SVO sentence + 以后 (after)，+ main clause.
Noun/simple SVO sentence + 以前 (before)，+ main clause.
Noun/simple SVO sentence + 的时候 (when/while at)，+ main clause.

Noticing and awareness spotlight:
Use of temporal marker "了" with "verb + verb complement" structure

When a two-character "verb + verb complement" structure is used, the temporal marker "了" must be placed after the verb complement.
For example,
［我］看到**了**。(I saw.)
However, if the verb complement consists of two characters instead of just one, then "了" can be placed either after the one-character first main verb or after the two-character verb complement.
For example,
他走**了**出来。(He walked out of there.)
他走出来**了**。(He walked out of there.)

© 2012 Fortune, T., Wieland, M., and MMIC Team

CO IPA 4.3.5	**Describe attributes of person/place/thing using modifying phrases**	
For example: 有很多植物的热带雨林 (the rain forest that has lots of plants) 绿色的、提供栖息地的热带雨林 (the rain forest that is green and provides shelter)		
Approaching	**Attaining**	**Expanding**
热的 (hot) 多雨的(rainy) 绿色的(green) 湿的(wet) 好 (good/nice) 坏 (bad/mean) 热心 (warmhearted) 高 (tall) 矮 (short)	有很多植物的 (that has lots of plants) 有很少植物的 (that has few plants) (没)有帮助的 (that is helpful/not helpful)	提供栖息地的 (that provides shelter) 踢足球踢得好的 (that is good at soccer) 跑得快的 (that runs fast)
Attributive adjective [adj. + 的] + Head noun	Relative clause [(没)有 + noun + 的] + Head noun	Relative clause [verb + noun + 的] + Head noun
Form focus: Relative clause [verb + noun + 的] + Head noun		
Modifying phrases can be either attributive adjectives, e.g., 多雨的 (rainy) or relative clauses, e.g., 有 (have) 很多植物 (lots of plants) + 的 (that has lots of plants). Modifying phrases are placed in front of the head noun (e.g., 提供栖息地的热带雨林).		
Noticing and awareness spotlight		
1. The negation of 有 (have) is 没有		
The negative particle 没 (méi), not 不 (bù), must be used to negate 有 (yǒu) [have]. 没 can be used by itself to express 没有 (méi yǒu). If 没 is used by itself, 有 is assumed such that 没 = 没有.		
2. Adjective repetition		
Adjective repetition occurs frequently in Chinese. There are different ways to do this: 1. “aa” form, e.g., 长长 (very long), 厚厚 (thick)、薄薄 (thin)*; 2. “abb” form, e.g., 白皑皑 (snow-white, pure white, as very white as snow), 毛绒绒 or 毛茸茸 (hairy or downy), 亮晶晶 (glistening, sparkling, shining), 湿漉漉 (wet, moist); 3. “aabb” form, e.g., 清清楚楚 (clear), 恍恍惚惚 (in a trance, absent-minded), 红红火火 (as very red/warm as fire). * Use of double adjectives is typical for young children.		
3. The “monosyllabic” rule and use of 的		
When describing persons, places and things, the use of 的 between adj. and noun will occur if the adjective is made up of more than one syllable, for example, 两只有蹼的脚 (two webbed feet).		

© 2012 Fortune, T., Wieland, M., and MMIC Team

However, use of 的 between the adjective and noun is omitted if the adjective is only one syllable. For example, 两只大眼睛 (two big eyes).

CO IPA 4.3.6	**Describe emotional states of main characters using adjectives or adverbs**	
For example:		
Approaching	**Attaining**	**Expanding**
高兴 (happy) 伤心 (sad) 累 (tired) 害怕 (afraid/scared) 生气 (angry) 紧张 (nervous) 不好意思 (embarrassed) 平静 (calm) 兴奋 (excited) 骄傲 (proud) 惊讶 (amazed) 满足 (satisfied)	高兴的脸 (happy face) 高兴地说 (speak happily) 伤心的男孩 (sad boy) 伤心地哭 (cry sadly) 愉快的歌 (joyful song) 愉快地唱 (sing joyfully) 不好意思的表情 (embarrassed expression) 不好意思地笑 (smile embarrassedly)	迷惑 (confused) 失意 (frustrated) 焦虑 (anxious) 感激 (grateful) 痛苦 (agonized) 愉快 (amused) 惊愕 (astonished) 精疲力尽 (exhausted) 雄赳赳，气昂昂 (cocky)
Juan Daniel 很伤心。 Juan Daniel is very sad.	Juan Daniel 有(一)点儿紧张，可是他很快**地**平静下来。 Juan Daniel was a little bit nervous, but he quickly calmed down.	Juan Daniel 踢足球踢**得**精疲力尽。 Juan Daniel played soccer so hard that he was exhausted.
Subj. + “very” + adj., (“be” verb is omitted in Chinese.)	…, Subj. + adv. + “地” (de) + Verb	Subj. + Verb + Object + Verb (same as before) + “得” + complement
Form focus: Use of 的、地、得		
的 (de) is used when an adjective and/or a pronoun modifies a noun. The form is: Adj./pron. + 的 + Noun, for example, 炎热的夏天 (sweltering summer), 我们的薄膜模型 (our model membrane design) 地 (dì) is used when an adverb modifies a verb. The form is: Adv. + 地 + Verb (unlike in English!), for example, 高兴地欢呼 (cheer happily) 得 (de) is used when a verb complement is used after the main verb. The form is: Verb + 得 + Adv., for example, 我跑得快。(I ran fast.)		

© 2012 Fortune, T., Wieland, M., and MMIC Team

Sometimes, the main verb can be repeated if there is an object following the main verb. The form is:
Verb + Object + Verb + 得 + adv. , for example, 我踢足球踢得好。(I kick the soccer ball well.)

Noticing and awareness spotlight:

1. 落 as polyphone

To be a polyphone, "duō yīn zì" (多音字) in Chinese, a character must have two or more pronunciations and multiple meanings. Each pronunciation goes with one meaning.

For example:

落	luò	落后 verb, meaning "fall behind, fall down"
	là	落下 verb, meaning "forget, leave behind"

2. Use of "有 + (一)点儿" structure

"Be" verb is sometimes translated into "have/has" when "(一)点儿" is used in front of an adj., e.g., 我有一点儿累。(I am a little tired.)
The structure is:
Subj. + 有(have/has) + "(一)点儿" + adj.

CO IPA 4.3.7	**State or identify attributes of something/someone using a predicative construction with the main noun modified by a relative clause**	
Approaching	**Attaining**	**Expanding**
中国人和萨尔瓦多人吃东西一样/吃一样的东西。 Chinese and Salvadoran eat things in the same way/ eat the same things.	中国人和萨尔瓦多人吃的东西很相似。 The things that Chinese and Salvadoran people eat are very similar.	中国人，美国人和萨尔瓦人多人都爱踢球。 Chinese, Americans and Salvadoran all love playing soccer.
Noun phrase [noun phrase (A and B)] + verb + object + 一样 as adverb OR 一样 as adjective + 的 + noun.	Modifying noun phrase [noun phrase (A and B)/ (A, B and C) + verb + 的] + main noun (omitted "be" verb) + intensifier + adjective	Modified noun phrase (A, B and C) + verb + direct object

Form focus

1. Use of modifying noun phrase to describe main noun

One way to modify a noun is with a modifying noun phrase. A modifying phrase can be a relative clause: a nominalized clause placed in front of the noun.

© 2012 Fortune, T., Wieland, M., and MMIC Team

For example, 中国人 (A) 和 (and) 萨尔瓦多人 (B) 吃 (verb, to eat) 的 (nominalization) 东西 (main noun): "Modifying noun phrase [noun phrase (A and B) + verb + 的] + main noun" construction that means "the things that Chinese and Salvadoran people eat."
2. Use of verb phrase or relative clause to describe main noun
There are several ways to describe persons/places/things. One way is to use a verb phrase and tell what the person/thing does. For example, 蜥蜴和青蛙一起住。 A lizard and a frog live together. 前锋 + 射门得分。A forward kicks the ball and scores goals. 水瓶 + 盛水。 A water bottle carries water. Another way to describe something/someone is to use a relative clause: a nominalized verb + object + 的 clause placed in front of the noun being modified. For example, **蜥蜴和青蛙住的** + 地方- The places that a lizard and a frog live in… 一个**设计科技的** +人 - "someone who designs technology" **设计宇宙飞船的** + 航空工程师 – "An aerospace engineer who designs spaceships" A third way to describe someone/something is to use the predicative adjective "Subj. + ("be" Verb 是 understood) + adjective" construction either by itself or in combination with a relative clause. An example of the latter is, 蜥蜴和青蛙住的地方很相似。 The places that a lizard and a frog live in are very similar.

CO IPA 4.3.8	**Identify similarities and differences between two things using topic as noun/verb phrase at sentence beginning**	
Approaching	**Attaining**	**Expanding**
中国和/跟萨尔瓦多的食物一样/不一样。 Chinese and Salvadoran foods are the same/different.	人们喜欢的运动，在中国和在美国很相似/不同。 The sports people enjoy in China are similar to/different from the sports people enjoy in the U.S.	人们喜欢的运动，在中国和在美国大同小异/大相径庭。 The sports people enjoy in China are generally the same but little bit different from/ dramatically different from the sports people enjoy in the U.S.
A + 和/跟 (and) + B + 一样 (same)/不一样 (different)	Topic as noun phrase ("modifying phrase [noun + verb] + 的+ main noun + ,) + sentence (在+ Country A and 在+ Country B + [是 assumed] intensifier + adj.).	Topic as noun phrase ("modifying phrase [noun + verb] + 的+ main noun + ,) sentence (在+ Country A and 在+ Country B + [是 assumed] + four-character idiomatic expressions.

© 2012 Fortune, T., Wieland, M., and MMIC Team

Form focus: Topic as noun/verb phrase at sentence beginning
In Mandarin, expressing the topic (what the sentence is about) is very important. The topic usually refers to something that the speaker and hearer already know about. The topic of the sentence does not need to have a direct relationship with the main verb as would a subject. The topic or that which is being discussed is usually placed at the beginning of the sentence and set off by a comma. It can be either a noun phrase or a verb phrase. For example, **Noun phrase: 人们喜欢的运动，**在中国和在美国很相似/不同。(The sports people enjoy in China are similar to/different from the sports people enjoy in the U.S.) **Verb phrase: 运用工程设计步骤，**工程师们需要遵循这些步骤。(Using the engineering design process, engineers need to follow these steps.)
Noticing and awareness spotlight
1. Use of "noun + 的 + noun" to express possession
To indicate ownership/possession, the structure is "noun + 的 + noun", for example, 中国**的**食物 means China's food or Chinese food.
2. Use of four-character idiomatic expressions
Four-character idiomatic expressions are commonly used phrases that carry a great of meaning beyond the four characters themselves. They have their origins in traditional Chinese stories, myths and historical facts and are best understood within these contexts. There are about 5,000 such expressions in use. A few commonly used four-character idiomatic expressions that can be found in ***Juan Daniel's Fútbol Frog*** are: 小心翼翼 (very carefully) 一泄千尺 (fall down one thousand feet, fall far down, cascade down) To pique student curiosity about these idiomatic expressions, teachers will need to research their origins and discuss the historical context with students.

CO IPA 4.3.9	**Distinguish the superlative degree among two or more things/ideas within a topic using a locative phrase 在…里/在…中 to identify the whole topic, and the superlative adverb 最**	
Approaching	**Attaining**	**Expanding**
在葡萄干实验里，我喜欢的步骤是……。 In the raisin experiment, the step that I like is…	在葡萄干实验里，我最喜欢的步骤是……。 In the raisin experiment, my favorite step is…	在葡萄干实验里，我没有比……更喜欢的步骤了。 In the raisin experiment, I don't have any other step that I like better than ….

© 2012 Fortune, T., Wieland, M., and MMIC Team

Topic as noun phrase (在 zài + noun + 里 lǐ), modifying noun phrase (subj + verb + 的) + main noun/subject + 是 (be verb) ….	Topic as noun phrase (在 zài + noun + 里 lǐ), modifying noun phrase (subj +最 superlative + verb + 的) + main noun/subject + 是 (be verb) …	Topic as noun phrase (在 zài + noun + 里 lǐ), subj. + negation + 比 (comparison marker) + noun phrase + 更 (than)…
在工程设计步骤里，我喜欢的是……。 In the engineering design process, I like the…	在工程设计步骤里，我最喜欢的部分是……。 In the engineering design process, my favorite part is…	在这工程设计步骤里，我没有比……更喜欢的部分了。 In this engineering design process, I don't have any other part that I like better than ….
Topic as noun phrase (在 zài + noun +中), modifying noun phrase (subj + verb + 的) + main noun/subject + 是 (be verb) ….	Topic as noun phrase (在 zài + noun +中), modifying noun phrase (subj +最 superlative + verb + 的) + main noun/subject + 是 (be verb) …	Topic as noun phrase (在 zài + noun +中), subj. + negation + 比 (comparison marker) + noun phrase + 更 (than)…

Form focus

1. The superlative adverb 最

最 is an adverb that indicates the superlative form meaning "most," "-est" and is placed immediately before the verb/adjectival verb is modifies.

2. Use of "在 zài …. 里 lǐ" as topic phrase

在 zài …里 lǐ: describing time or location "in" or "inside of"

- 在葡萄干实验里： in the raisin experiment
- 在足球场上：on the soccer field

Noticing and awareness spotlight: Use of "没有比……更" expression

没有比……更(Don't have more … than …)
Negative particle + verb + comparative

Another way to express the superlative is to say there is nothing –er (better, bigger, worse, etc.).

CO IPA 4.3.10	**Support ideas/opinions using compound sentences with adverb 因此**	
Approaching	**Attaining**	**Expanding**
因为这是第一个。	提问是第一个步骤，**因此**，我把它放在里。	由于提问是工程设计步骤中第一个步骤，因此，我把它放在最前面。

Because this is the first.	"Ask question" is the first step, as a result, I put it here.	Due to "Ask question" being the first step in the Engineering Design Process, as a result I put it in the front.
....., 因为 (because)…… 因为 (because)……, 所以 (so) + simple SVO (Subj-verb-direct object)	……，因此 (as a result, therefore), subj +把 + direct object noun phrase + verb + locative complement	由于 (due to)……, 因此 (as a result, therefore), subj +把 + direct object noun phrase + verb + locative complement

Form focus

1. ……，因此 (as a result, therefore), ……

因此 (as a result, therefore) is an adverb that can be used instead of the conjunction 因为 in the second clause. Emphasis is given by setting the adverb off with a comma.

2. Use of 把-construction vs. simple SVO (Subj-verb-direct object)

A 把-construction (including 把 + direct object + verb + complement) will typically reference something specific that the speaker thinks the hearer knows about, not something unknown to the hearer.

If a sentence *communicates something that happens to the direct object*, then use of the 把-construction is appropriate.
For example,

- Juan Daniel **把**球踢进了。 (Subj +把 + direct object noun phrase + verb + directional complement + past tense marker.) Juan Daniel kicked the soccer ball in.
- 我们**把**这个想法放/写在这个部分。 (Subj +把 + direct object noun phrase + verb + locative complement.) We wrote/put our ideas in this section.

However, if there is *no additional information given as to what has happened to the direct object*, use of a 把-construction is incorrect. For example, in the sentence below, the 把-construction is not allowed:
Juan Daniel 想他的青蛙。(Subj. + verb + direct object noun phrase) Juan Daniel misses his frog.

Noticing and awareness spotlight

1. Use of 由于 (due to)

"由于 (due to)……, 因此 (as a result, therefore), ……" reflects a more formal register and is more likely to be used in written communication.

2. Use and placement of "在 zài+ abstract noun +上 shàng"

"在 zài + abstract noun + 上 shàng" meaning "regarding," "on," "speaking of"
For example,

- 在这个问题上: on this issue/problem
- 在吃的东西上: speaking of food (things people eat)

© 2012 Fortune, T., Wieland, M., and MMIC Team

3. The negation of 有 (have) is 没有 (méi yǒu)
The negative particle 没 (méi), not 不 (bù), must be used to negate 有 (yǒu) [have]. For example, **有**共同点 (have in common) **没有**共同点 (not have in common) 没 can be used by itself to express 没有 (méi yǒu). If 没 is used by itself, 有 is assumed such that 没 = 没有.

CO IPA 4.3.11	**Predict cause-effect relationship using hypothetical conditional sentences with 如果/要是……, (那么)…… and the adjectival verb 可能**

For example:

Approaching	**Attaining**	**Expanding**
我会留下青蛙。 I may keep the frog.	如果我是 Juan Daniel，我（可能）**会**问爸爸妈妈我能不能留下这只青蛙。 If I were Juan Daniel, perhaps I would ask my mom and dad if I could keep this frog.	如果我是 Juan Daniel，我（可能）**会**不留下这只青蛙，因为青蛙**可能**想回家。 If I were Juan Daniel, perhaps I would not keep this frog, because the frog may want to go home.

Form focus

1. Auxiliary "helping verbs"
In Mandarin, auxiliary "helping verbs" indicate the ability, possibility, intention or desire to carry out an action. The following are examples of auxiliary "helping verbs": 会 'will likely + verb', 会 'will know + verb', 能/可以'able to + verb', 要/应该'ought to + verb',要/想'want to + verb', 可以'allow to + verb', 不可以'prohibited to + verb'
2. How auxiliary "helping verbs" are same/different from other verbs
Like other verbs, auxiliary verbs… a. occur as the A element in A-not-A questions, for example, **要不要**给 Peters 女士写一封信？(Do you think that Juan Daniel will write a letter to Ms. Peters or not?) b. can be negated, or example: 他明天不会踢足球。(He will not play soccer tomorrow.) Unlike other verbs, auxiliary verbs … a. must co-occur with a verb or an assumed verb; For example, 薄膜的孔应该不应该很小？(Should the holes of a membrane be small?) b. does not take aspect markers such as 了(le), 过(guò), 着 zhe; c. cannot be modified by intensifiers, such as 很 (very) or 更 (even more); d. cannot be nominalized;

© 2012 Fortune, T., Wieland, M., and MMIC Team

e. cannot occur before the subject; f. cannot take a direct object.
3. Three uses of character 会
a. 会 as a verb (to know). For example: 我**会**中文。(I know Chinese.) b. 会 as an auxiliary + verb (specifies a learned, acquired and usually mental ability: "know how to" or "to learn how"). For example: 我**会**踢足球 。(I know how to play soccer.) c. 会 as an auxiliary + verb (refers to the likelihood of the occurrence of an event: "will", "most likely"). For example: 冠军赛明年会在这里举行。(The championship game will be held here next year.)
4. Two uses of the character **要**
a. 要 as an auxiliary + verb (refers to the likelihood of the occurrence of an event: "will", "most likely"). For example: 冠军赛明年要在这里举行。(The championship game will be held here next year.) b. 要 as a verb (to want, need). For example: 我要两张咖啡过滤纸。(I want two coffee filters.)

CO IPA 4.3.12	**Use a developing understanding of basic units of word formation in Chinese to infer and construct meaning with written text**
Form focus: radical → character → compound/word	
1. radical	
A radical is the smallest meaningful orthographic unit in compound characters, for example, 虫 (insect) is used in the character 蛙 (frog). 虫 (insect) can also be a stand-alone character. There are three types of radicals: semantic (give information about character meaning) [手 (hand)], phonetic (give information about character pronunciation) [分 (fen) in the compound 纷 (one after another)], and perceptual (do not give information about character meaning or pronunciation, instead function as visual fillers) [此 (this, these in classical Chinese), however, in the compound 嘴 (mouth) the radical 此 functions as a perceptual radical providing information about neither meaning nor pronunciation].	
2. character	
A Chinese character is a meaningful orthographic unit that is always pronounced as one syllable. Chinese characters have evolved as a writing system over millennia and have developed in various ways. Some characters are **pictographs** that were originally drawings of concrete objects, for example, 雨 (rain), the four dots depicting the rain coming down from the sky; others are better described as **ideographs** because they were created as graphic representations of more abstract ideas such as the notion of "above", 上, the stroke above the horizontal line indicating the idea of "above" or "up." Another way to create characters was to combine two or more pictographs or ideographs to portray a new meaning, for example, 休 (to rest), a combination	

© 2012 Fortune, T., Wieland, M., and MMIC Team

of the pictographs for person, 人, and a person leaning against a tree, 木. These types of characters are referred to as **ideogrammatic characters**. Over 90% of Chinese characters were created as **phono-semantic compound characters** and are made up of a combination of semantic and phonetic radicals. For example，控 (to control), the semantic radical on the left side,手 (hand) , indicates that the word meaning will include an action with a hand, and the phonetic radical on the right side 空 (kōng), helps the reader with character pronunciation "kòng."
3. compound
Compounds consist of at least two characters, neither of which is an affix, a character that on its own lacks meaning but when added to other characters becomes a meaningful unit. Most Chinese words are compounds. Compounds have various types of syntactic relationships. A few compound types: *Verb-Object:* 踢足球 (to kick soccer ball)、开球 (to kick of)、发誓 (to pledge) *Verb-Complement*: 摔倒 (to fall down)、改进 (to improve and get better)、进来 (to come in) *Subject-Predicate*: 天亮 (bright [sky is bright]) *Number-Classifier*: 各种 (various kinds)、一道 (a ray of…)、一片 (a patch of…) *Adverb-Verb*: 慢跑 (to jog [to run slowly])、快走 (to hurry [to walk fast]) *Verb-Verb-Noun*: 栖息地 (habitat [to stay and rest at a place]) *Adjective-Adjective-Noun*: 浅桃色 (light peach color)、吉祥物 (mascot [happy and auspicious object])

CC **IPA 4.3.13**	**Order a series of events using sequencing adverbs**	
Approaching	**Attaining**	**Expanding**
第一、第二、第三…… Ordinals: first, second, third… 首先，……，然后，……，最后，…… First, …, later, …, finally, … 开始 in the beginning ……先……，……后…… …before…, …after…	首先，……，再，……，接下来，…… Initially, …, then, …, next, … 起先、起初 in the beginning 后来 later on 那以后 after that 结束 at the end	于是 consequently, as a result 总之 in conclusion 稍后 afterwards 最终 at the end

© 2012 Fortune, T., Wieland, M., and MMIC Team

For example:		
第一步是……。在第一步里，我们……。 第二步是……。在第二步里，我们……。 第三步是……。在第三步的时候，我们打算用……。 The first step was _____. In the first step, we _____. The second step was _____. In the second step, we ____. The third step is _____. In the third step, we plan to use _____.	冠军赛的时候，Juan Daniel 和队友们**起初**落后，**后来**他们想出了一个取胜的好办法，**最后**他们赢了。 In the championship game, Juan Daniel's team was losing at the beginning, later on they came up with a plan, and finally, they won the game.	上星期冠军赛的时候，Juan Daniel 和队友们**起初**落后，**稍后**他们用工程设计程序制定了一个取胜的好办法，**于是**他们取得了胜利。 In the championship game last week, Juan Daniel's team was losing at the beginning, afterwards they came up with a plan using the engineering design process, and finally, they won the game.
Form focus: Placement of sequencing adverbs		
Sequencing adverbs are usually placed at the beginning of the sentence and set off with a comma.		

CC **IPA 4.3.14**	**Express a personal opinion**	
Approaching	**Attaining**	**Expanding**
我觉得／想…… I feel like/think… 也许/可能…… Maybe/ Perhaps…	在我看来…… It seems to me like… 对我来说，…… In my opinion, … 我认为…… I believe/think …	我建议…… I suggest… 我的看法是…… My thoughts are… 我是说…… What I mean is…

© 2012 Fortune, T., Wieland, M., and MMIC Team

CC IPA 4.3.15	Express agreement/disagreement	
Approaching	**Attaining**	**Expanding**
好。 Good. 我同意。 I agree. 我也是／同意。 I also + verb (am/agree). 对。 Exactly/Correct.	你说得对。 You are correct. 你完全正确。 You're absolutely right. 我也是这么认为的。 I think so too. 我也不这么认为。 I don't think so either.	我的想法跟你的一样。 I share your thoughts. 我赞成。 I agree (more formal). 我完全赞同。 I agree with you entirely.
不。 No. 不好。 Not good。 不同意。 I don't agree with you. 不对。 Not exactly.	我不是这么认为的。 I don't think so. 是，可是你不觉得……? Yes, but don't you think… 我觉得我不同意。 I'm afraid I have to disagree。	我的意见跟你的不同。 My suggestions are different from yours. 我想和你讨论讨论…… I must take issue with you on that. 然而 However
Noticing and awareness spotlight		
1. Repetition of verb		
Repetition of a verb, e.g., 讨论讨论 (to discuss), can be used to soften the tone of voice.		
2. Use of 吗？ 吧？ 呢？		
A few particles are commonly used at the end of questions. 吧？ is used to invite agreement. 呢？ is a tag question meaning “, and you?” 吗？ is a question particle that is used when one expects a “yes” or “no” response.		

© 2012 Fortune, T., Wieland, M., and MMIC Team

CC IPA 4.3.16	**Negotiate to reach consensus**	
Approaching	**Attaining**	**Expanding**
好吧。 OK. 我同意。 I agree.	我同意你的想法。 I agree with your idea. 我也一样。 Same here.	不约而同。 We reach the consensus without consulting with each other.

CC IPA 4.3.17	**Ask for clarification about feedback/advice/idea**	
For example:		
Approaching	**Attaining**	**Expanding**
你说什么? What did you say? 我不懂。 I didn't understand that. 什么意思? What does it mean?	我没听懂，请你再说一次。 I didn't understand, could you please say it again? 你是不是说…… Did you say… 你说的是……的意思吗? Does what you said mean…?	你可不可以重复一遍? Could you repeat it one more time? 请你再跟我讲一讲。 Please explain it to me one more time. 你可以给我解释一下吗? Could you explain that to me?
Form focus: Nominalization using 的 (e.g., 你说的是……)		
A verb/verb phrase can become a noun by placing the particle 的 (de) after it. For example, the verb phrase 你说 (you say) can function as a noun phrase 你说的, meaning "what you say" in 你说的是 (What you say is…).		

CC IPA 4.3.18	**Negotiate turn-taking**	
For example:		
Approaching	**Attaining**	**Expanding**
该我了! My turn! 到你了! Your turn!	下一个该轮到谁了? Who is the next? 我觉得该你了。 I think it's your turn.	如果你不赶紧，我都不能往下进行。 If you don't hurry, none of us can move on to the next.

© 2012 Fortune, T., Wieland, M., and MMIC Team

下一个是谁? Who's next? 下一个是你吗? Are you the next one?	我在等你呢! I am waiting for you!	

© 2012 Fortune, T., Wieland, M., and MMIC Team
Engineering is Elementary® "Model Membrane" Unit

Focused Assessment Phase – "Beyond" Activities

Students and teacher will discuss feedback and share final email drafts with each other. They will celebrate the end of the unit.

Interpersonal Task Activity 4

Time: 40 minutes

1. Once all sections of the IPA have been scored, pass out scored rubrics:
   a. MMIC IPA 3-4/4-1: *Presentational (Written) Scoring Rubric*
   b. MMIC IPA 4-4: *Interpersonal Scoring Rubric*
2. Allow student groups and pairs time to share and discuss their feedback with each other. Allow student groups and pairs time to discuss feedback with the teacher.
3. On pages 22+ of MMIC IPA 4-IWB (IWB page #s will depend on the number of writing groups in the class), share each group's engineer email with the class, allowing student groups the chance to read them aloud. Other students should be encouraged to compliment or comment on the emails. After each email is read aloud, send it (for students to see) to the engineer.

Teacher Tip: *Encourage students to clap, cheer, or otherwise show excitement when each email is sent. This is the culminating activity of a long unit and assessment. They should be proud of all they've accomplished!*

© 2012 Fortune, T., Wieland, M., and MMIC Team

Language Function-Form-Vocabulary Connections (Activity 4)		
CC IPA 4.4.1	**Request feedback**	
Approaching	**Attaining**	**Expanding**
你觉得我们的薄膜模型**怎么样**? What you do think of our model membrane?	你觉得**如何把**我们的薄膜模型做得更好? How do you think we could improve our model membrane?	你认为**如何使**我们的薄膜模型工作得更好? Do you have any ideas/suggestions for how we could make our model membrane work even better?
Subj. + V + Object + Question word	Subj. + V + Question word + 把-construction (把 + Object + V + 得 + adverb)	Subj. + V + Question word + 使-construction (使 + Object + V + 得 + adverb)

CC IPA 4.4.2	**Accept feedback/advice/idea**	
Approaching	**Attaining**	**Expanding**
行。 OK. 好主意。 Good idea. 可以。 Yes, I can.	不错。 Not bad. 你说得对。 You are correct. 我会照做。 I will do as you say.	高明。 Brilliant. 多谢指教。 Thank you for your advice. 我会吸取你的建议。 I will accept your suggestion.

CC IPA 4.4.3	**Ask for clarification about feedback/advice/idea**	
Approaching	**Attaining**	**Expanding**
你说什么? What did you say? 我不懂。 I didn't understand that. 什么意思? What does it mean?	我没听懂，请你再说一次。 I didn't understand, could you please say it again? 你是不是说…… Did you say… 你说的是……的意思吗? Does what you said mean…?	你可不可以重复一遍? Could you repeat it one more time? 请你再跟我讲一讲。 Please explain it to me one more time. 你可以给我解释一下吗? Could you explain that to me?

© 2012 Fortune, T., Wieland, M., and MMIC Team

Form focus: Nominalization using 的 (e.g., 你说的是……)
A verb/verb phrase can become a noun by placing the particle 的 (de) after it. For example, the verb phrase 你说 (you say) can function as a noun phrase 你说的, meaning "what you say" in 你说的是 (What you say is…).
Noticing and awareness spotlight: Use of 吗？ 吧？ 呢？
A few particles are commonly used at the end of questions. 吧？ is used to invite agreement. 呢？ is a tag question meaning "…, and you?" 吗？ is a question particle that is used when one expects a "yes" or "no" response.

CC IPA 4.4.4	**Express gratitude**	
Approaching	**Attaining**	**Expanding**
谢谢! Thank you! 多谢! Thanks a lot!	十分感谢！ (Thank you so much!) 你的主意太棒了! Your ideas were so very helpful! 感激不尽! I cannot thank you enough!	我非常感激你给我的建议! I really appreciate the ideas that you gave me! 你的建议对我太有帮助了! I am very grateful for your ideas!

© 2012 Fortune, T., Wieland, M., and MMIC Team

Evidence of Learning

- Completed MMIC IPA 4-2: *El Salvador-China-US Cross-cultural Comparisons*
- Completed "Chattanooga ChooChoo" flipchart posters
- Final version of email, ready to send to the engineer
- Recordings of interpersonal tasks, Parts 1 and 2
- Completed scoring rubrics
  a. MMIC IPA 3-4/4-1: *Presentational (Written) Scoring Rubric* (teacher evaluation)
  b. MMIC IPA 4-4: *Interpersonal Scoring Rubric* (teacher evaluation)

© 2012 Fortune, T., Wieland, M., and MMIC Team

Vocabulary List

Content-obligatory (CO)

了解 Recognize			
Pīnyīn	**Characters**	**English meaning**	**Parts of speech**
biān jí	编辑	to edit	verb
biāo diǎn fú hào	标点符号	punctuation	noun
bù fèn	部分	section	noun
dǎ cǎo gǎo	打草稿	to draft	verb
guān diǎn	观点	perspectives	noun
guī dǎng	归档	file	noun/verb
huò dé	获得	gain	verb
jì qiǎo	技巧	skill	noun
jié shù yǔ	结束语	closing	noun
jué xīn	决心	determination	noun
kòng gé	空格	spacing	noun
kuà wén huà bǐ jiào	跨文化比较	cross-cultural comparisons	noun phrase
qǐ fā	启发	inspiration	noun
rì qī	日期	date	noun
shōu xìn rén míng zi	收信人名字	name of recipient	noun
shǔ míng	署名	signature	noun
suō jìn	缩进	indentation	noun
tǔ chǎn	土产	products	noun
wèn hòu	问候	greeting	noun
xí sú	习俗	practices	noun
xiǎo xīn yì yì	小心翼翼	carefully	adverb
xiū gǎi	修改	to revise	verb
zhèng wén	正文	body of a letter or an email	noun
zhǔ tí	主题	subject	noun
zhù yǔ	祝语	well wishes	noun
识记 Produce			
Pīnyīn	**Characters**	**English meaning**	**Parts of speech**

© 2012 Fortune, T., Wieland, M., and MMIC Team

bó de	薄的	thin	adjective
bó mó	薄膜	membrane	noun
bù zhòu	步骤	step	noun
cái liào	材料	materials	noun
cè shì	测试	test hypothesis	verb
dà lù	大陆	continent	noun
fēn xī	分析	analyze results	verb
gǎi biàn	改变	changes	noun
gǎi jìn	改进	improve	verbal phrase
gǎi jìn de	改进的	improved	adjective
gài zi	盖子	lid	noun
gào bié	告别	leave-taking	noun
gōng chéng shè jì bù zhòu	工程设计步骤	Engineering Design Process	noun
gōng chéng shī	工程师	Engineer	noun
guān chá	观察	to observe	verb
hǎi mián	海绵	sponge	noun
hòu	厚	thick	adjective
huì bào	汇报	report results	verb
jì lù	记录	to record	verb
jiǎ shè	假设	make hypothesis	verb
jié guǒ	结果	result	noun
jié lùn	结论	draw conclusions	verb
kā fēi guò lǜ zhǐ	咖啡过滤纸	coffee filter	noun
kē xué jiā	科学家	Scientist	noun
liú xíng de yùn dòng	流行的运动	popular sports	noun
lǚ bó zhǐ	铝箔纸	aluminum foil	noun
měi guó de	美国的	American	adjective
méi yǒu dòng/méi yǒu kǒng	没有洞／没有孔	does not have holes	verb
méi yǒu yòng/bù guǎn yòng	没有用／不管用	does not work well	verbal phrase
mó xíng	模型	to model/modeling	verb
ní lóng shā chuāng bù	尼龙纱窗布	nylon screen	noun

© 2012 Fortune, T., Wieland, M., and MMIC Team

píng huá	平滑	smooth	adjective
qì hòu	气候	climate	noun
qù jiě jué shí jì wèn tí	去解决实际问题	to solve real-world problems	verbal phrase
rè dài yǔ lín	热带雨林	rain forest	noun phrase
rén kǒu	人口	population	noun
róng qì	容器	container	noun
sà ěr wǎ duō de	萨尔瓦多的	Salvadoran	adjective
shā bù	纱布	cheesecloth	noun
shǎn liàng	闪亮	shiny	adjective
shè jì	设计	to design	verb
shè jì	设计	plan	verbal phrase
shēng wù gōng chéng shī	生物工程师	Bioengineer	noun
shí wù	食物	food	noun
shí yàn	实验	experiment	verb/noun
shì yí shì xīn de xiǎng fǎ	试一试新的想法	to try out new ideas	verbal phrase
shǒu dū	首都	capital city	noun
sī kǎo	思考	imagine	verbal phrase
sòng lǐ	送礼	gift-giving	noun
tí wèn	提问	ask questions	verb
tí wèn	提问	ask	verbal phrase
wén huà xí sú	文化习俗	culture and custom	noun phrase
yǒu dòng/yǒu kǒng	有洞／有孔	has holes	verb
yǒu liǎng gè kǒng de lǚ bó zhǐ	有两个孔的铝箔纸	aluminum foil with two holes	noun phrase
yǒu yí gè kǒng de lǚ bó zhǐ	有一个孔的铝箔纸	aluminum foil with one hole	noun phrase
yǒu yòng/guǎn yòng	有用／管用	works well	verbal phrase
yǔ yán	语言	language	noun
yùn dòng ǒu xiàng	运动偶像	sports idol	noun
yùn yòng xiǎng xiàng lì	运用想象力	to use imagination	verbal phrase

© 2012 Fortune, T., Wieland, M., and MMIC Team

zhān bù	毡布	felt	noun
zhì zuò	制作	create	verbal phrase
zhǐ zuò de	纸做的	made of paper	adjective
zhōng guó de	中国的	Chinese	adjective

Content-compatible (CC)

了解 Recognize			
Pīnyīn	**Characters**	**English meaning**	**Parts of speech**
bǐ jiào jí	比较级	comparative expression	noun
biǎo dá de	表达的	presentational	adjective
biǎo xiàn	表现	performance	noun
biāo zhǔn	标准	criterion	noun
cè shì	测试	assessment	noun
cóng wén zhāng dào zì jǐ de lián xì	从文章到自己的联系	text-self connection	
dá chéng gòng shí	达成共识	to negotiate consensus	verb
fǎn kuì	反馈	feedback	noun
fǎn kuì quān	反馈圈	feedback loop	noun
fēn lèi	分类	to sort	verb
fǔ hé jù	复合句	compound sentence	noun
gǔ zhǎng	鼓掌	to clap	verb
hé zuò fēn lèi bìng pái xù	合作分类并排序	joint sort and sequence	verbal phrase
huān hū	欢呼	to cheer	verb
huǒ chē de dí shēng	火车的笛声	train whistle	noun phrase
huǒ chē shòu piào yuán de jiào shēng	火车售票员的叫声	train conductor's call	noun phrase
huǒ chē zhàn	火车站	train station	noun
jiāo liú de	交流的	interpersonal	adjective
kāi dòng de huǒ chē	开动的火车	choo choo train	noun
kuà wén huà biǎo de lèi bié	跨文化表的类别	cross cultural chart category	noun phrase
lǐ jiě de	理解的	interpretive	adjective

© 2012 Fortune, T., Wieland, M., and MMIC Team
Engineering is Elementary® "Model Membrane" Unit

lián dòng cí jié gòu	连动词结构	serial verb combination	noun
liàng cí	量词	classifiers	noun
pái xiān hòu shùn xù	排先后顺序	to sequence	verb
pái xù	排序	to order (place in order)	verb
píng fēn biǎo	评分表	rubric	noun
píng gū	评估	to evaluate	verb
qīng chǔ de yǎn shì	清楚地演示	clearly present	verbal phrase
quán bān	全班	whole class	noun
sān chóng wéi ēn tú	三重维恩图	Triple Venn Diagram	noun
shì jué jiē chù	视觉接触	eye contact	noun
shǒu shì	手势	gestures	noun
shù liàng	数量	quantity	noun
tán tán	谈谈	chat	verb
tóng bàn	同伴	pairs/partners	noun
tóng xué píng gū	同学评估	peer evaluation	noun
xiǎo zǔ	小组	small group	noun
xiū shì yǔ	修饰语	modifying phrases	noun
yǔ yǎn kòng zhì	语言控制	language control	noun phrase
zhèng què de shǐ yòng	正确地使用	correctly use	verbal phrase
zhì liàng	质量	quality	noun
zhǔn què de huì bào	准确地汇报	accurately report	verbal phrase
zì wǒ píng gū	自我评估	self-assessment	noun
zōng hé de	综合的	integrated	noun
识记 Produce			
Pīnyīn	**Characters**	**English meaning**	**Parts of speech**
bēi	杯	cup	noun
bǐ	比	to compare	verb
bó	薄	thin	adjective
bù fèn	部分	some	adverb
bù tóng de	不同的	different	adjective
cái liào guǎn lǐ yuán	材料管理员	Magnificent Materials Manager	noun

© 2012 Fortune, T., Wieland, M., and MMIC Team

cè liáng	测量	to measure	verb
cè shì	测试	to test	verb
chéng gōng	成功	success	noun
chēng wèi	称谓	name	noun
dà xiǎo shì zhōng	大小适中	right-sized	adjective
dài tì	代替	to replace	verb
dào	倒	to pour	verb
dī	滴	to drip	verb
dù liàng héng	度量衡	measurement	noun
èr fèn zhī yī	二分之一	1/2	measure word
fā jiàn rén	发件人	from	noun
fā sòng	发送	to send	noun
fèn shù	分数	fraction	noun
fù dài	附带	attached	adjective
fù jiàn	附件	attachment	noun
gǎi biàn	改变	to change	verb
gǎi jìn	改进	to improve	verb
gǎn xiè	感谢	Thank you (formal register)	verb
gèng	更	even more	adverb
gōng zuò guǎn lǐ yuán	工作管理员	Terrific Taskmaster	noun
guǎn yòng/bù guǎn yòng	管用／不管用	useful/not useful	adjective
háo shēng	毫升	milliliter	noun
hòu	厚	thick	adjective
jì huà	计划	to plan	verb
jì lù yuán	记录员	Remarkable Recorder	noun
jiě jué fāng àn	解决方案	solution	noun
kǒng	孔	small hole	noun
kòng zhì	控制	to control	verb
kuài	快	fast	adverb
màn	慢	slow	adverb
méi yǒu	没有	none	adverb

© 2012 Fortune, T., Wieland, M., and MMIC Team

miáo shù	描述	to describe	verb
quán bù	全部	all	adverb
rén wù	人物	characters	noun
shì hé	适合	suitable	adjective
shǐ…jīng yà	使…惊讶	surprise	verb
shōu jí	收集	to collect	verb
shōu jiàn rén	收件人	to	noun
sì fèn zhī yī	四分之一	one fourth/quarter	measure word
tài duō	太多	too much	adverb phrase
tài shǎo	太少	too little	adverb phrase
tǐ jí	体积	volume	noun
tōng guò	通过	to pass through	verb
wèn tí	问题	problem	noun
xiāng sì de	相似的	similar	adjective
xiǎo shù	小数	decimal	noun
yǎn shì	演示	to present	verb
yǎn shì zhì jiǎn yuán	演示质检员	Polished Presenter	noun
yè tǐ liáng bēi	液体量杯	measuring cup	noun
yuē	约	approximately	adverb
zhèng hǎo	正好	just right/exact amount	adverb phrase
zhì zuò	制作	to create	verb
zhōng	中	medium	adverb
zhōng wén dū chá yuán	中文督察员	Chinese Champion	noun
zuì duō	最多	at most	adverb phrase
zuì xǐ huān de	最喜欢的	favorite	adjective

© 2012 Fortune, T., Wieland, M., and MMIC Team
Engineering is Elementary® "Model Membrane" Unit

电子邮件评分表

MMIC *EiE*®《薄膜模型单元》，综合能力测试（三）/（四）：表达能力（书面）

日期: _____ 学生 1: _____ 学生 2: _____

学生 3: _____ 学生 4: _____

4 = 优: 超越要求，对教学目标的理解和运用的能力卓越

3 = 良: 完善要求，对教学目标的理解和运用的能力良好

2 = 及格: 达到要求，对教学目标的理解和运用的能力一般

1 = 不及格: 达不到要求，对教学目标的理解和运用的能力有限

意见反馈活动的必要内容:

每个小组要交: ____ 电子邮件的第一稿

____ 电子邮件意见反馈表

____ 电子邮件的修改稿

____ 两个薄膜模型的照片

最后评分的必要内容:

每个小组要交: ____ 电子邮件的第一稿和照片

____ 电子邮件意见反馈表

____ 电子邮件的修改稿

____ 有老师反馈意见的电子邮件评分表

____ 电子邮件的成稿

	标准	得分	评语
邮件格式	收件人:	**4 3 2 1**	
	主题:	**4 3 2 1**	
	添加附件	**4 3 2 1**	
	称呼	**4 3 2 1**	
	问候语	**4 3 2 1**	
	正文	**4 3 2 1**	
	结束语	**4 3 2 1**	
	署名和日期	**4 3 2 1**	
	邮件格式得分:	**_____/32**	

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

	标准	得分	评语
学术内容	写信的原因	4 3 2 1	
	“提问”的例子	4 3 2 1	
	“思考”的例子	4 3 2 1	
	“设计”的例子	4 3 2 1	
	“制作”的例子	4 3 2 1	
	工程师对“改进”的建议	4 3 2 1	
	两个薄膜模型分别所用的材料的数量和测试结果	4 3 2 1	
	第一个和“改进”的薄膜模型的比较	4 3 2 1	
	工程设计程序中最喜欢的部分	4 3 2 1	
	“为什么”最喜欢这个部分	4 3 2 1	
	感谢和祝语	4 3 2 1	
	学术内容得分:	**_____/44**	
语言控制	正确使用量词和计量单位	4 3 2 1	
	正确使用整数、分数和小数报告数量	4 3 2 1	
	准确使用形容词短语来描述材料的属性	4 3 2 1	
	准确使用“了”和时间副词来表示过去式汇报材料选择和测试结果	4 3 2 1	
	正确使用介词短语“为了……”来说明原因	4 3 2 1	
	正确使用双动词结构来解释材料选择并汇报结果	4 3 2 1	
	正确使用比较级来比较第一个和改进的薄膜模型	4 3 2 1	
	适当表达感激	4 3 2 1	
	语言控制得分:	**_____/32**	

96-108 优　　80-95 良　　65-79 及格　　0-64 不及格　　**总分: _____/108**

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

Presentational (Written) Scoring Rubric

MMIC Engineering is Elementary® Model Membrane Unit, IPA 4: Presentational (Writing) Task

Date: _____ Student 1: _____ Student 2: _____

Student 3: _____ Student 4: _____

4 = Exceeding: Exceeds expectations and demonstrates exceptional command of unit goals.

3 = Achieving: Is above average and demonstrates very good command of unit goals.

2 = Partially achieving: Meets expectations and demonstrates adequate command of unit goals.

1 = Not achieving: Falls short of expectations and demonstrates poor command of unit goals.

Feedback Phase Non-negotiables:

Group handed in...
- **____ First draft of email**
- **____ Peer feedback checklist**
- **____ First revision of email**
- **____ Photos of both models**

Final Score Non-negotiables:

Group handed in...
- **____ First draft of email with photos**
- **____ Peer feedback checklist**
- **____ First revision of email**
- **____ Teacher feedback rubric**
- **____ Final email**

	Criteria	Scale	Comments
Email Format	To:	**4 3 2 1**	
	Subject:	**4 3 2 1**	
	Attach a file	**4 3 2 1**	
	Name of recipient	**4 3 2 1**	
	Correct greeting	**4 3 2 1**	
	Body (Content of email)	**4 3 2 1**	
	Closing	**4 3 2 1**	
	Group members' signatures and date	**4 3 2 1**	
	Email Formatting Skills Total:	**_____/32**	

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

	Criteria	Scale	Comments
Academic Content	State reason for writing the email	**4 3 2 1**	
	Give “Ask” example	**4 3 2 1**	
	Give “Imagine” example	**4 3 2 1**	
	Give “Plan” example	**4 3 2 1**	
	Give “Create” example	**4 3 2 1**	
	State “Improve” suggestion from engineer	**4 3 2 1**	
	Report materials used and results for the two models	**4 3 2 1**	
	Make a comparison/contrast between first and “improved” designs and explain	**4 3 2 1**	
	Describe the favorite part of the engineering design process	**4 3 2 1**	
	State reason “why” ____ was the favorite part	**4 3 2 1**	
	Include thank you and well wishes	**4 3 2 1**	
	Academic Content Total:	**_____/44**	
Language Control	Correctly use classifiers to report materials and units of measurement	**4 3 2 1**	
	Correctly use numbers/fractions/decimals to report quantities	**4 3 2 1**	
	Accurately use modifying phrases to describe attributes of materials	**4 3 2 1**	
	Accurately use action verbs with 了 (temporal marker) and adverbs of time to report materials selection and test results in past time	**4 3 2 1**	
	Correctly use preposition/coverb (为了) + noun phrase to give reasons	**4 3 2 1**	
	Accurately use serial verb construction with pivotal noun to report and justify materials selection	**4 3 2 1**	
	Accurately use comparative expressions to make comparisons between original and improved model membrane models	**4 3 2 1**	
	Appropriately express gratitude	**4 3 2 1**	
	Language Control Total:	**_____/32**	

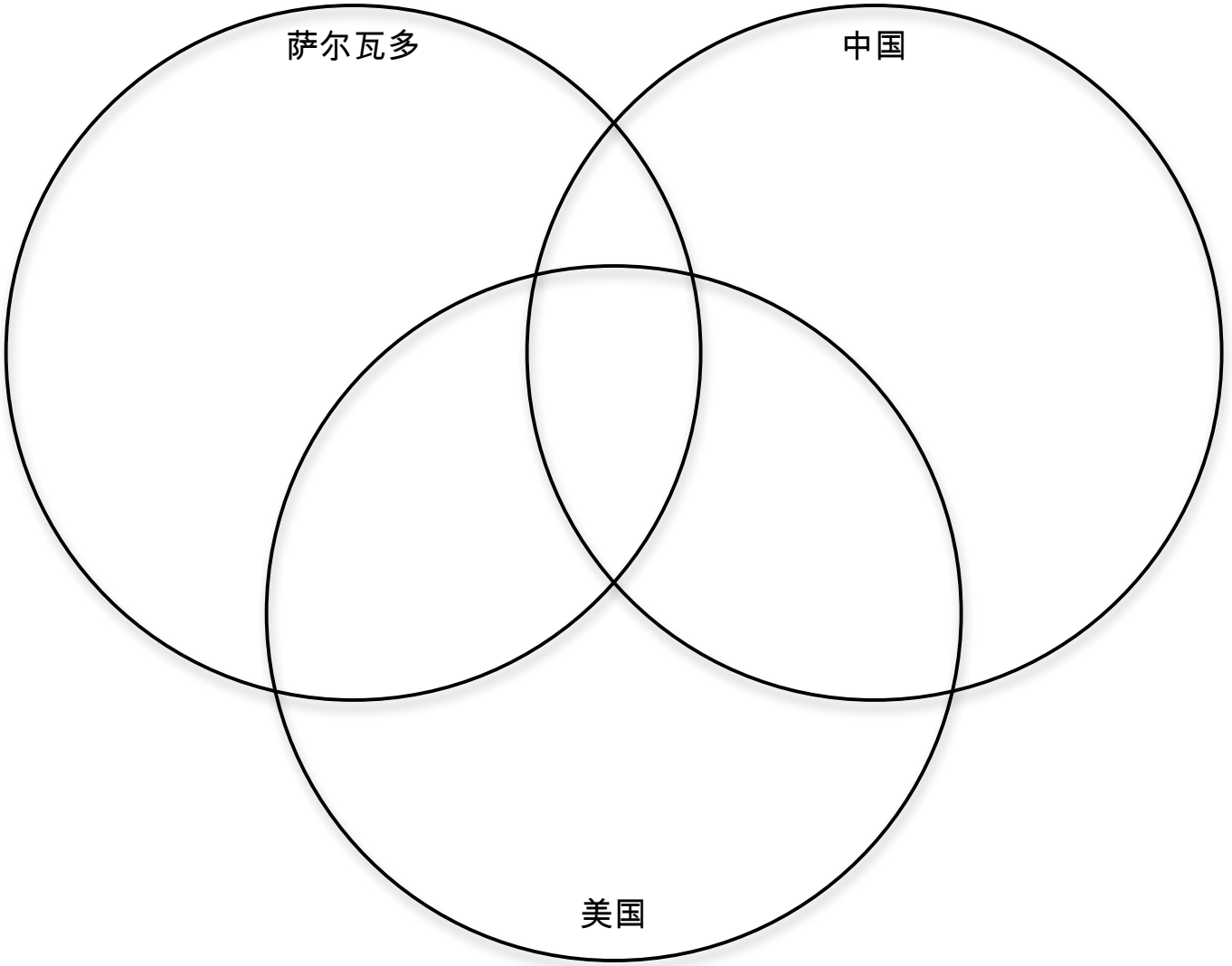
96-108 Exceeding 80-95 Achieving 65-79 Partially achieving 0-64 Not achieving **Final Points: ____/108**

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

姓名：_____ 日期：_____

萨尔瓦多-中国-美国跨文化比较：地域、习惯和土产

说明：按照你学到的跨文化表和其它集合图，在以下的圆圈里写出字词和短语来表示萨尔瓦多、中国和美国相同和不同的地域、习惯和土产。

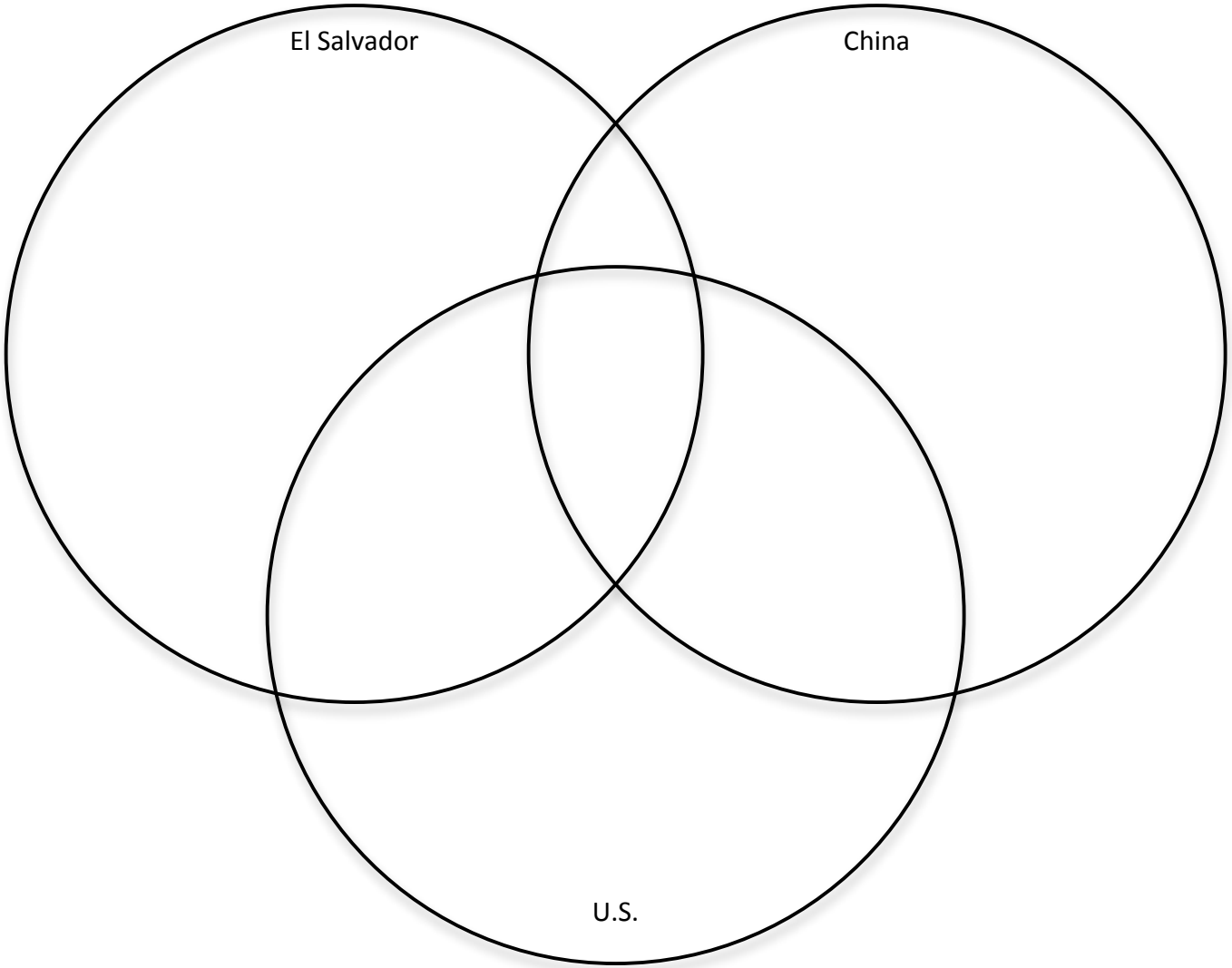


© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication permitted

Name: _____ Date: _____

El Salvador-China-US Cross-cultural Comparisons: Places, Practices, Products

Directions: Referring to the cross-cultural chart and other Venn diagrams in the classroom, in the circles below, write words and phrases that describe similarities and differences among El Salvador, China and the United States.



© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication permitted

交流能力测试—教师参考

准备

完成交流能力测试 1 和 2 每组（两个）学生大约需要 5 分钟（总共）。在两个活动的过渡时间，请每组学生填写评分表。为了保证每个学生有平等的机会参与对话，请按照以下两个标准分组：1）同一组的两个学生有相似的口语能力；2）同一组的两个学生对彼此友好，可以完成对话。一部分学生完成这些测试，另一部分学生完成他们的电子邮件成稿。如果有可能的话，请一名助教帮助学生的写作部分。

老师注意：两个学生一组，把他们叫叫到你的跟前。大声朗读以下的说明和问题。

简介

今天，你们要跟同伴讲一讲这个单元里你们学到的东西！你们要完成有两个任务。第一，你们可以讲一讲工程师和科学家在他们工作的时候使用的步骤。第二，选 2-3 个文化方面的话题，谈一谈萨尔瓦多、中国和美国有什么一样和不一样的地方。记住，说得越多越好！当然，只能用中文！

好，从第一部分开始。

第一部分：工程设计步骤和科学方法 [大约 1-2 分钟]

在这一单元里，你们学习了工程师和科学家是做什么的。在这个信封里，有一些过塑的卡片。每张卡片上都写有工程师或者科学家工作的一个步骤。你们要一起动脑筋想一想把它们归类（指一指桌子上的两类），而且排列顺序。你们可以互相帮助吻！你们要:
首先，每人轮流从信封里拿出一张卡片，一人一次。然后，大声朗读卡片上的信息。接下来，商量商量这张卡片属于哪一类。你们一定要都同意才行。最后，你们要把每一类中的卡片按顺序排列。你们做完以后，你们可以商量一下谁汇报哪一类。这两类是:

1. 工程设计步骤

2. 科学方法步骤

[请给学生足够的时间分类和排序。]

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

第一部分答案

	科学方法	工程设计步骤
有什么不同的步骤?	提问 假设 测试 分析 结论 汇报	提问 思考 设计 制作 改进

现在，谁要汇报一下工程设计程序的步骤？[请一个学生演示。] 你在设计制作你的薄膜模型的时候，你最喜欢哪一个步骤？为什么？

现在，（第二个学生）汇报科学方法的步骤。[请第二个学生演示。] 你在做葡萄干实验的时候，你最喜欢哪一个步骤？为什么？

第二部分：故事回顾和跨文化比较 [大约 2-3 分钟]

注意： 第二部分要紧接着第一部分。

你们的第二个任务是回想一下 Juan Daniel 的故事，谈一谈萨尔瓦多、中国和美国的人文和文化有什么相同和不同的地方。我有两个信封。每个信封里都装满了问题。你们可以从任何一个信封里拿出一张纸条，并且问一问你的同伴上面的问题。你要听一听他/她的回答，做出一些回应。最后，你要说一说你对这个问题是怎么想的。
你们都有机会抽签。谁先来?

注意： 请事先准备好两个信封。每个信封是一个话题。把下面的问题剪开，放在相应的信封里。

信封 #1: Juan Daniel 的故事

Chinese	English
你最喜欢故事中的哪一个角色？为什么？	Who was your favorite character in the story? Why?
你最不喜欢故事中的哪一个角色？为什么？	Who was your least favorite character in the story? Why?
你最喜欢故事的哪一个部分，为什么？	What was your favorite part of the story? Why?
Juan Daniel 遇到什么问题？他怎么解决？你喜欢他的解决方法吗？如果是你， 你会怎么做?	What was Juan Daniel's problem in this story, and how did he solve it? Did you like the way he solved it? Would you have done anything

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

	differently?
故事中，最令你感到惊奇的是什么?	What was the biggest surprise in the story?
你有没有认识像 Juan Daniel 一样的朋友? 他是谁？他们哪里像?	Do you know someone who is like Juan Daniel? Who is it? How are they similar?

信封 #2: 跨文化比较

Chinese	English
故事中萨尔瓦多、美国和中国有什么不一样的地方?	What did you learn from this story about how El Salvador is different from the U.S. or from China?)
你想去萨尔瓦多玩吗？为什么?	Would you like to visit El Salvador? Why or why not?
看看文化比较表：你对哪一个文化习俗最感兴趣?	Look at our cross-cultural chart—What cultural information was the most interesting to you? Why?
从我们的跨文化表里选出一类。你觉得在这一类别里，萨尔瓦多、中国和美国在哪些方面相同？在哪些方面不同?	Choose a category from our cross-cultural chart. If you think about that category, in what ways are El Salvador, China and the US the same? And different?

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

Logistics

Interpersonal Performance Tasks 1 and 2 will take about 5 minutes (total) for each student pair. Allow transition time in between each pair to complete the scoring rubric. To promote balanced conversations, pair students in advance with others who have a similar level of proficiency and who are comfortable speaking with one another. Students can do this assessment while the rest of the class works on final email drafts. It is strongly recommended that the teacher enlist a teaching assistant to help students with their writing during this time.

Note to Teacher: Call students in pairs. Read the following directions and questions out loud.

Introduction

Today, you have the chance to talk with each other about all we have been learning in this unit! There are two different activities for you to complete. In Part 1, you will have a chance to talk about the steps that engineers and scientists use in their work. In Part 2, you will choose 2-3 cultural topics and then discuss some similarities and differences among the Salvadoran, Chinese and US cultures based on these topics. Keep in mind, your goal is to say as much as you can and, of course, use only Chinese!

Okay, let's start with Part 1.

Part 1: The Engineering Design Process / The Scientific Method [About 1-2 minutes]

In this unit, you learned about engineers and scientists and what they do in their work. In this envelope, there are laminated cards. On each card, there is a step that engineers *or* scientists use in their work. Your task is to work together to put the steps into the correct category (*point to the two categories (Engineering Design Process, Scientific Method) on the table*), and in the correct order. Feel free to help each other as you do this!

First, take turns pulling one laminated card out of the envelope at a time. Then, read the step out loud. Next, talk together as you choose which category the step belongs to. Be sure that you both agree on your choices. Then, work together to order the steps under each category from first to last. When you have finished, decide which category you will *each* present to me. Again, here are the two categories:

1. Steps in the Engineering Process

2. Steps in the Scientific Method

Allow students time to sort and sequence step cards.

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

Part 1 Answer Key

	Scientific Method	Engineering Process
What steps are involved in their work?	Ask questions Make hypothesis Test hypothesis Analyze results Draw conclusion Report conclusion/new finding	Ask questions Imagine solutions Plan design Create design Improve design

Now, who will present what the steps are in the engineering design process? *Allow one student to present these steps*. When you made your model membranes, what step in the engineering process was your favorite? Why?

Now (Student 2), present the steps in the scientific method. *Allow the other student to present these steps.* When you did the raisin experiment, what step in the scientific method was your favorite? Why?

Part 2: Story Reflection and Cross-cultural Comparison Task [About 2-3 minutes]

Note: This task *immediately* follows Part 1.

Your second task is to talk about the Juan Daniel story and discuss similarities and differences among the people and cultures of El Salvador, China and the US. I have two envelopes that are filled with questions. Each of you must choose a slip of paper from one of the envelopes. Then, ask your partner the question. Listen to your partner's answer, and *then* say something about their answer. Lastly, share your own answer to the question.

You will both have a chance to choose a question. Who would like to go first?

Note: In advance, prepare two envelopes, one for each topic, by cutting these questions into strips and placing them in the appropriate envelopes.

Envelope #1: *Juan Daniel* Story Reflection Task

你最喜欢故事中的哪一个角色？为什么？

(Who was your favorite character in the story? Why?)

你最不喜欢故事中的哪一个角色？为什么？

(Who was your least favorite character in the story? Why?)

你最喜欢故事的哪一个部分，为什么？

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

(What was your favorite part of the story? Why?)

Juan Daniel 遇到什么问题？他怎么解决？你喜欢他的解决方法吗？如果是你，你会怎么做？

(What was Juan Daniel's problem in this story, and how did he solve it? Did you like the way he solved it? Would you have done anything differently?)

故事中，最令你感到惊奇的是什么？

(What was the biggest surprise in the story?)

你有没有认识像 Juan Daniel 一样的朋友？他是谁？他们哪里像？

(Do you know someone who is like Juan Daniel? Who is it? How are they similar?)

Envelope #2: *Cross-cultural Comparison Task*

故事中萨尔瓦多、美国和中国有什么不一样的地方？

(What did you learn from this story about how El Salvador is different from the U.S. or from China?)

你想去萨尔瓦多玩吗？为什么？

(Would you like to visit El Salvador? Why or why not?)

看看文化比较表：你对哪一个文化习俗最感兴趣？

(Look at our cross-cultural chart—What cultural information was the most interesting to you? Why?)

从我们的跨文化表里选出一类。你觉得在这一类别里，萨尔瓦多、中国和美国在哪些方面相同？在哪些方面不同？

(Choose a category from our cross-cultural chart. If you think about that category, in what ways are El Salvador, China and the US the same? And different?)

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

Envelope #1: Juan Daniel Story Reflection Task

For teacher: Cut out each question and place in Envelope #1

你最喜欢故事中的哪一个角色？为什么？

你最不喜欢故事中的哪一个角色？为什么？

你最喜欢故事的哪一个部分，为什么？

Juan Daniel 遇到什么问题？他怎么解决？你喜欢他的解决方法吗？如果是你， 你会怎么做？

故事中，最令你感到惊奇的是什么？

你有没有认识像 Juan Daniel 一样的朋友？他是谁？他们哪里像？

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

Envelope #1: *Juan Daniel* Story Reflection Task

For teacher: Cut out each question and place in Envelope #1

Who was your favorite character in the story? Why?

Who was your least favorite character in the story? Why?

What was your favorite part of the story? Why?

What was Juan Daniel's problem in this story, and how did he solve it? Did you like the way he solved it? Would you have done anything differently?

What was the biggest surprise in the story?

Do you know someone who is like Juan Daniel? Who is it? How are they similar?

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

Envelope #2: Cross-cultural Comparison Task

For teacher: Cut out each question and place in Envelope #2

故事中萨尔瓦多、美国和中国有什么不一样的地方?

你想去萨尔瓦多玩吗? 为什么?

看看文化比较表: 你对哪一个文化习俗最感兴趣?

从我们的跨文化表里选出一类。你觉得在这一类别里, 萨尔瓦多、中国和美国在哪些方面相同? 在哪些方面不同?

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

Envelope #2: Cross-cultural Comparison Task

For teacher: Cut out each question and place in Envelope #2

What did you learn from this story about how El Salvador is different from the U.S. or from China?

Would you like to visit El Salvador? Why or why not?

Look at our cross-cultural chart—What cultural information was the most interesting to you? Why?

Choose a category from our cross-cultural chart. If you think about that category, in what ways are El Salvador, China and the US the same? And different?

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

Laminated Cards for Part 1: *Joint Sort and Sequence Task*

(Engineering Design Process and The Scientific Method)

For teacher: Cut out and laminate each step and the two headings

科学方法

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

工程设计步骤

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

提问
测试

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

分析

结论

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

汇报

提问

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

思考

设计

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

制作

改进

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

Laminated Cards for Part 1: *Joint Sort and Sequence Task*
(Engineering Design Process and The Scientific Method)

For teacher: Cut out and laminate each step and the two headings

Scientific Method

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

Engineering Design Process

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

ask questions
test hypothesis
analyze results

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

draw conclusion
report results
ask questions

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

imagine solutions
plan design
create model

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

improve design and model

© 2012 Fortune, T., Wieland, M., and MMIC Team
Duplication Permitted

交流能力评分表

MMIC *EiE*®《薄膜模型单元》，综合能力测试（四）：交流能力

日期: _____ 学生 1: _____ 学生 2: _____

4 = 优: 超越要求，对教学目标的理解和运用的能力卓越

3 = 良: 完善要求，对教学目标的理解和运用的能力良好

2 = 及格: 达到要求，对教学目标的理解和运用的能力一般

1 = 不及格: 达不到要求，对教学目标的理解和运用的能力有限

	标准	得分	评语
多学科知识	**第一部分** 两人一组选择和排序		
	区分工程设计步骤和科学方法的步骤	4 3 2 1	
	排列工程设计步骤和科学方法的步骤	4 3 2 1	
	说明选择每个步骤的理由	4 3 2 1	
	说明“最喜欢的”步骤和葡糖干实验或者薄膜模型设计步骤的联系	4 3 2 1	
	第二部分 复述故事并做跨文化比较		
	通过回答有评估性或假设问题，展示对 Juan Daniel 故事的理解	4 3 2 1	
	通过回答关于萨尔瓦多/中国/美国有评估性或假设问题，展示对跨文化表的理解	4 3 2 1	
	对照和比较萨尔瓦多/中国/美国具有文化特性的地域/习惯/土产	4 3 2 1	
	针对故事的方方面面做出相应的“故事”到“自己”的联系	4 3 2 1	
	多学科知识得分:	**_____/ 32**	

© 2012 Fortune. T., Wieland, M., and MMIC Team
Duplication Permitted

	标准	得分	评语
语言控制	使用恰当的主语和主题	4 3 2 1	
	正确使用排序副词排列步骤	4 3 2 1	
	用“在…里”点出题目，并说明最喜欢的步骤/文化/故事的某个部分，而且正确使用最高级“最”	4 3 2 1	
	用不同的形容词来描述人物、物件和地方	4 3 2 1	
	用句首的名词或动词短语说明文化之间的相同点和不同点	4 3 2 1	
	用“在”的短语说明方位	4 3 2 1	
	用适当短语表达同意和不同意，并达到意见统一	4 3 2 1	
	语言控制得分:	**_____/ 28**	
交流技巧	用手势或肢体语言表达一个复杂的概念	4 3 2 1	
	和同伴商讨并达成共识	4 3 2 1	
	能够通过重述、问题、和换句话说维持一段对话	4 3 2 1	
	表达清楚，语调清晰	4 3 2 1	
	和同伴交流良好	4 3 2 1	
	和同伴有视觉交流	4 3 2 1	
	交流技巧得分:	**_____/ 24**	

总分: _____/84

76-84 优　　**68-75** 良　　**59-67** 及格　　**0-58** 不及格

© 2012 Fortune. T., Wieland, M., and MMIC Team
Duplication Permitted

Interpersonal Scoring Rubric

MMIC Engineering is Elementary® Model Membrane Unit, IPA Part 4: Interpersonal Tasks, Parts 1-2

Date: _____ Student 1: _____ Student 2: _____

4 = Exceeding: Exceeds expectations and demonstrates exceptional command of unit goals.

3 = Achieving: Is above average and demonstrates very good command of unit goals.

2 = Partially achieving: Meets expectations and demonstrates adequate command of unit goals.

1 = Not achieving: Falls short of expectations and demonstrates poor command of unit goals.

	Criteria	Scale	Comments
Multidisciplinary Content	**Part 1** Joint sort and sequence task		
	Sorts steps of engineering design process and scientific method	4 3 2 1	
	Orders steps of engineering design process and scientific method	4 3 2 1	
	States and justifies preference for one step	4 3 2 1	
	Makes a clear connection between "favorite" step and raisin experiment or model membrane design process	4 3 2 1	
	Part 2 Story reflection and cross-cultural comparison task		
	Demonstrates comprehension of Juan Daniel story by responding to evaluative or hypothetical questions	4 3 2 1	
	Demonstrates comprehension of cross-cultural chart by responding to evaluative or hypothetical questions about El Salvador/China/US	4 3 2 1	
	Compares and contrasts culture-specific places/practices/products of El Salvador/China/US	4 3 2 1	
	Makes text-to-self connections to various story elements	4 3 2 1	
	Multidisciplinary Content Total:	**_____/ 32**	

© 2012 Fortune. T., Wieland, M., and MMIC Team
Duplication Permitted

	Criteria	Scale	Comments
Language Control	Uses task- and subject matter-appropriate words and phrases	4 3 2 1	
	Sequences steps using a variety of sequencing adverbs in correct sentence position	4 3 2 1	
	States favorite steps/cultures/story elements using 在…里 to identify a larger context and the superlative marker 最 accurately	4 3 2 1	
	Gives supporting details for preferences/actions using compound sentences with adverb "因此" (as a result) and the 把-construction	4 3 2 1	
	Identify similarities and differences between cultures using topic as noun/verb phrase at sentence beginning	4 3 2 1	
	Express location using 在 [zài] in a locative phrase	4 3 2 1	
	Expresses agreement/disagreement and negotiates for consensus using a variety of appropriate phrases	4 3 2 1	
	Language Control Total:	**_____/ 28**	
Communication Strategies	Uses gestures and communicates idea with other words in Chinese when specific word is lacking	4 3 2 1	
	Collaboratively negotiates with partner to reach consensus	4 3 2 1	
	Keeps conversation going by rephrasing, asking for clarification, and offering vocabulary support	4 3 2 1	
	Speaks clearly and with good intonation	4 3 2 1	
	Responds to what partner says	4 3 2 1	
	Looks at partner when speaking	4 3 2 1	
	Communication Strategies Total:	**_____/ 24**	

76-84 Exceeding 68-75 Achieving 59-67 Partially achieving 0-58 Not achieving **Final Points: ____/84**

© 2012 Fortune. T., Wieland, M., and MMIC Team
Duplication Permitted

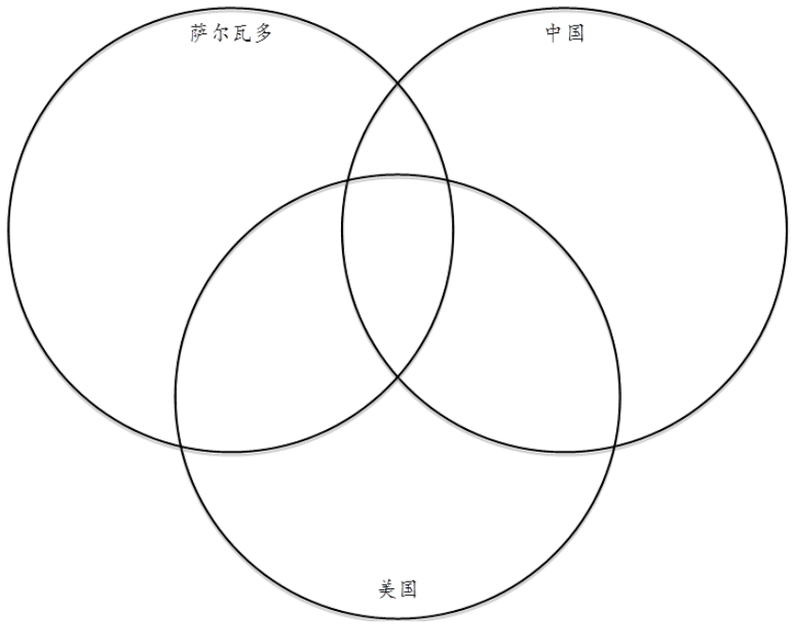
综合能力测试

表达能力 (口头)	• 小组演示改进的薄膜模型
理解能力	• 仔细听老师朗读第七章并完成测试 • 独立阅读第七章并完成测试
表达能力 (书面)	• 写一封电子邮件向访问工程师表示感谢
交流能力	• 按照工程设计程序两人一组排序 • 两人一组讨论一下*Juan Daniel* 的故事，然后问一问对方有关的文化知识

张贴**跨文化比较表在这里**

萨尔瓦多-中国-美国跨文化比较：地域、习俗和土产

说明：按照你学到的跨文化表和其它集合图，在以下的圆圈里写出字词和短语来表示萨尔瓦多、中国和美国相同和不同的地域、习俗和土产。



开动的火车

活动 #1

“谈谈”

“大家都上车！
火车要开到下一站了!”

跨文化比较

活动 #1

1.运动

2.食物

3.城市

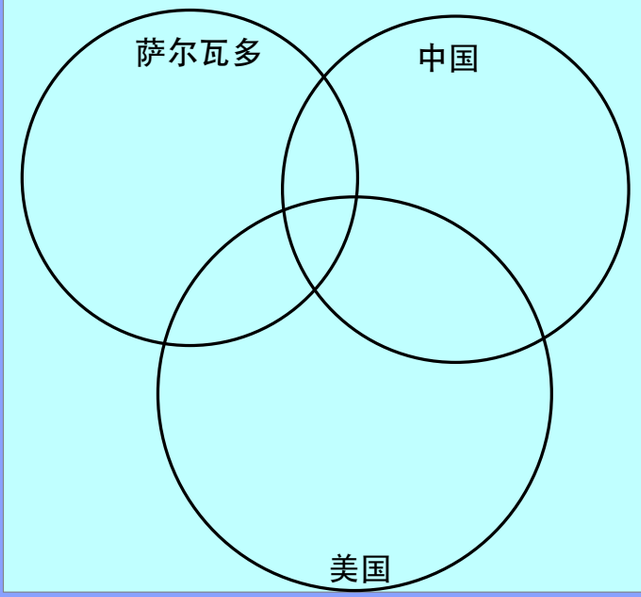
4.团队精神

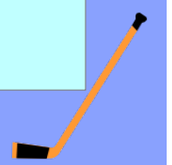
“大家都上车！
火车要开到下一站了!”

“谈谈”

活动 #1

运动





沟通交流能力

活动 #1

看起来...

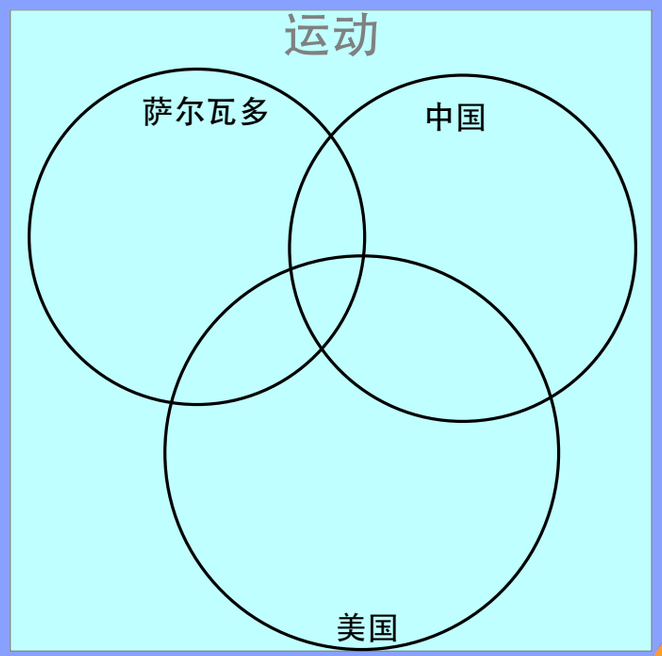
听起来...

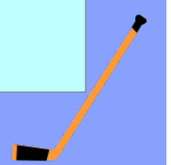
交流能力评分表

活动 #1

交流技巧	用手势或肢体语言表达一个复杂的概念
	和同伴商讨并达成共识
	能够通过重述、问题、和换句话说维持一段对话
	表达清楚，语调清晰
	和同伴交流良好
	和同伴有视觉交流

活动 #1





交流能力评分表

活动 #1

交流技巧	用手势或肢体语言表达一个复杂的概念
	和同伴商讨并达成共识
	能够通过重述、问题、和换句话说维持一段对话
	表达清楚，语调清晰
	和同伴交流良好
	和同伴有视觉交流

4 = 优：超越要求，对教学目标的理解和运用的能力卓越
3 = 良：完善要求，对教学目标的理解和运用的能力良好
2 = 及格：达到要求，对教学目标的理解和运用的能力一般
1 = 不及格：达不到要求，对教学目标的理解和运用的能力有限

开动的火车

活动 #1

在“谈谈”时，你们该做的事：

1. 用一到两分钟跟组员互相谈话

2.当有一位组员在说话的时候，其他人必须保持安静

3.轮流当记录员

4.使用刚才介绍过的交流技巧

活动 #1

人们喜欢的运动，在中国和在美国很相似/不同。

中国、萨尔瓦多和美国在...上有共同点，因此，我们把这个想法放/写在这个部分

中国人和萨尔瓦多人吃的东西很相似。

交际技巧

活动 #1

表示个人看法

在我看来.....

对我来说，.....

我认为.....

表示赞同

你说得对。

你完全正确。

我也是这么认为的。

我也不这么认为。

我的想法跟你的一样。

表示不赞同

我不是这么认为的。

是，可是你不觉得.....?

交际技巧

活动 #1

通过重述问题，换句话说来维持对话

你可不可以重复一遍?

你可以给我解释一下吗?

我没听懂，请你再说一次。

你是不是说.....

你说的是.....的意思吗?

达成共识

我同意你的想法。

我也一样。

交际技巧

活动 #1

轮流工作

下一个该轮到谁了?

我觉得该你了。

交流能力评分表

活动 #1

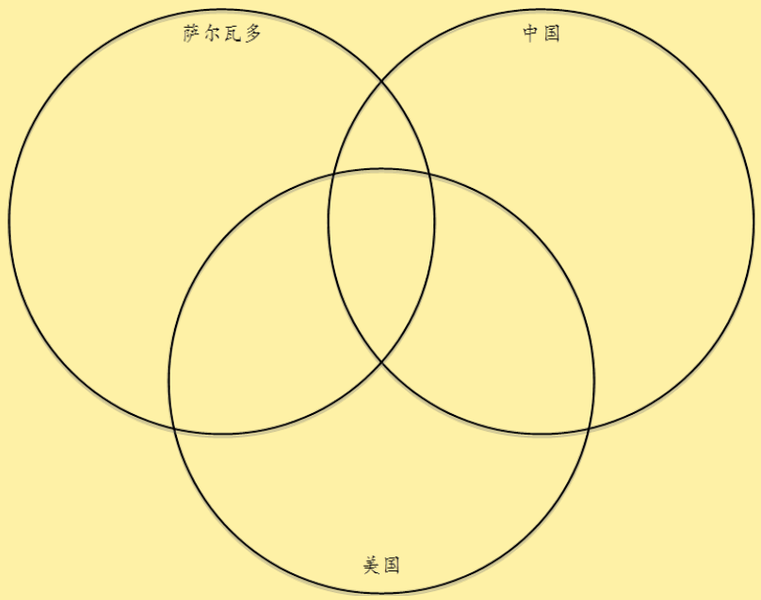
交流技巧	用手势或肢体语言表达一个复杂的概念
	和同伴商讨并达成共识
	能够通过重述、问题、和换句话说维持一段对话
	表达清楚，语调清晰
	和同伴交流良好
	和同伴有视觉交流

4 = 优: 超越要求，对教学目标的理解和运用的能力卓越
3 = 良: 完善要求，对教学目标的理解和运用的能力良好
2 = 及格: 达到要求，对教学目标的理解和运用的能力一般
1 = 不及格: 达不到要求，对教学目标的理解和运用的能力有限

活动 #2

萨尔瓦多-中国-美国跨文化比较：地域、习俗和土产

说明：按照你学到的跨文化表和其它集合图，在以下的圆圈里写出字词和短语来表示萨尔瓦多、中国和美国相同和不同的地域、习俗和土产。



跨文化比较例句：

活动 #2

中国、萨尔瓦多和美国在_____上有/没有共同点。

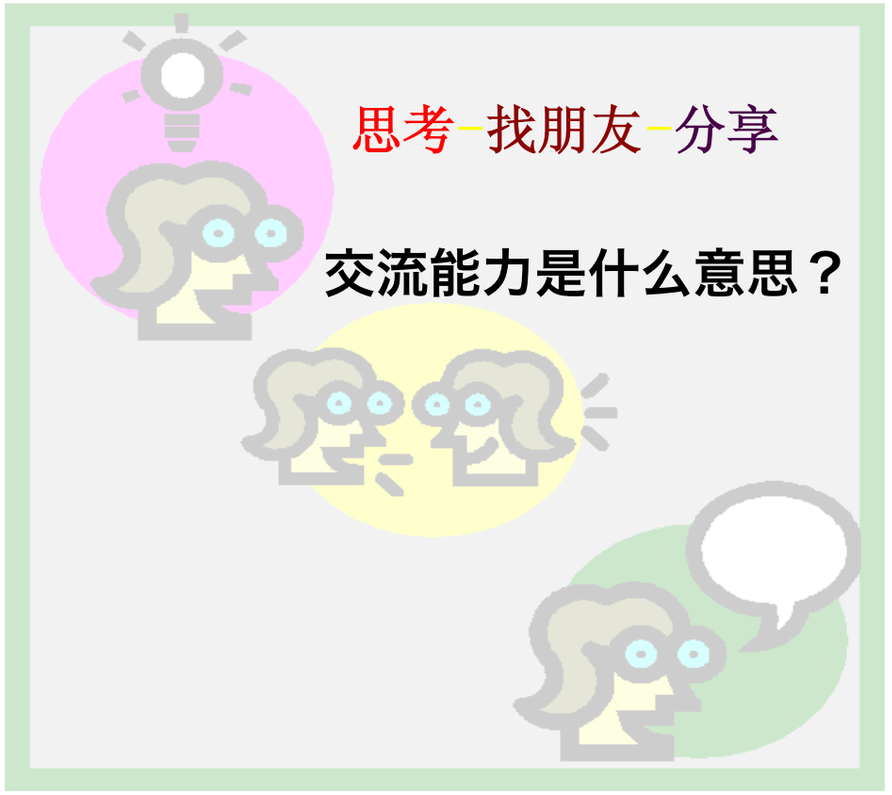
中国人，美国人和萨尔瓦人多人都爱_____。

人们喜欢的_____，在_____和在_____很相似/不同。

中国人和/跟萨尔瓦多人的食物一样/不一样。

综合能力测试

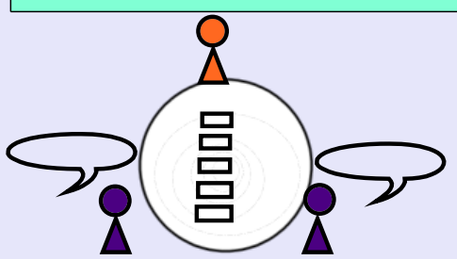
表达能力 (口头)	• 小组演示改进的薄膜模型
理解能力	• 仔细听老师朗读第七章并完成测试 • 独立阅读第七章并完成测试
表达能力 (书面)	• 写一封电子邮件向访问工程师表示感谢
交流能力	• 按照工程设计程序两人一组排序 • 两人一组讨论一下*Juan Daniel* 的故事，然后问一问对方有关的文化知识



活动 #4

综合能力测试（三）（四）步骤：
交流能力　　表达能力（书面）

老师做……	学生做……
老师请两位同学出来进行交流能力评估	写作电子邮件



张贴学生的电子邮件在这里，
让学生进行汇报。