高考新概念

3+X

聚合思维 英语
JUHE SIWEI

总动员
ZONG DONG YUAN

主编 郁祖权

知识经纬

三点聚焦

聚合思维导航

安徽教育出版社

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编写者　　程基本

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序 言

    思维是人类的特质,思维是智力的核心,思维更是能力的体现。思维的表现特征是素质教育重要的研究课题之一。古往今来成大器、立伟业者,无不有超凡的思维能力。诸葛亮以其对事物的深刻认识、缜密思维而料事如神,屡建奇功,成为中国古代智慧的化身;毛泽东在建国安邦中的文韬武略,无一不是其深邃洞察、周密思维的显现;爱因斯坦以其思维的独创性、批判性,创立了相对论等,成为 20 世纪的科学巨人;钱学森深刻、灵活、缜密的思维品质,使他成为中国两弹一星的功勋。

    人的智力是由多重因素构建的,但核心是思维。有些青年学生总感慨自己的智力不如他人,因而成绩不理想。其实不然,《简明不列颠百科全书》中指出:"智力的高低并非不可改变,科学的训练,可以将之增进和提高……"因而,科学地训练思维能力,便是提高智力的有效方法。《3+X 聚合思维总动员》正是在《发散思维辅导》之后,从另一个角度、另一个层面对中学生思维品质进行科学训练。心理学家认为:聚合思维与发散思维是思维结构中求同与求异的两种形式,二者都有新颖性,二者都是创进性思维的必要前提。吉尼斯纪录世界智商最高记录保持者莎凡说:"智力增进法可以最大限度地调整和拓展你的心智,把你带到智力发展的高峰。"可以预期,青年学生通过这两套书的训练,涉足思维方法,探究思维过程,培养思维品质,思维的深刻性、灵活性、独创性、批判性、敏捷性必将大大提高。

中国思维科学学会筹委会主任
山西省社会科学院思维所所长

张光鉴

2001 年 11 月

前 言

随着素质教育的实施和招生考试制度的改革,高考命题指导思想由知识立意为主转向能力立意为主;2002 年全国各省除台港澳外全部加入"3+X"命题行列,其中综合能力测试包括文科综合、理科综合等。命题的操作原则是既注重各学科内的综合,也兼顾跨学科的综合,跨学科的综合题占一定比例。为适应这种改革形势,我们编写了《3+X 聚合思维总动员》(套书),共有语、数、外、理、化、生、政、史、地九科,作为高中毕业班学生综合复习用书。

这是安徽教育出版社继《发散思维辅导》之后出版的又一套论述思维方法的助学读物。聚合思维是相对于发散思维的另一种思维方式,即调动各种知识信息朝着某个既定目标聚合前进,以期解决问题、整理知识或总结方法的一种思维方式。高中学生不同于初中学生,其思维具有一定的抽象性和概括性,并逐步由经验型向理论型转化,思维的独立性和批判性已得到良好发展。特别是进入综合复习的高三学生,正处在中学教育和大学教育的交接阶段,逻辑思维已居主导地位,具有鲜明的意识性,稍加点拨即可更上一层楼。

本套书共设置了观察实验、分析综合、比较分类、抽象概括、归纳演绎、联想猜测、类比映射、建模化归、逆向推论、假说反驳等十多种解题思维方法。以法统题,以题说法,一题多解,多题一法。我们力求做到:

精选五类习题 减少陈题,不选偏题,补充新题;穿插文字、符号、图形、实物的读图填空题;增加综合题、应用题、实验题和创新能力考查题;重视单项表述能力和整篇写作能力的写作题;精选或设计一批全学科和跨学科聚合思维训练题。

协调四种关系 基础与能力的关系,课内与课外的关系,全面与重点的关系,依据大纲和灵活选材的关系。

渗透五个因素 思想方法的介绍、知识技能的连接、创新思维的启迪、实验能力的训练和应试心态的调节。

本套书各分册结构框架:按课本章节知识谋篇布局,以聚合思维方法为主线贯穿全书;各章包括知识经纬,三点聚焦,聚合思维导航(其中包括思维方式的转换、思维方法的运用和思维品质的培养),聚合思维集训。书末附有全学科聚合思维训练和跨学科聚合思维拉练。

本套书作者队伍强大,编写人员均为教学第一线优秀教师,教学和科研功底深厚;大多为特级教师、全国模范教师、全国先进工作者、全国优秀教师、省劳动模范、省十大杰出教师、省"五一"劳动奖章获得者、享受国贴、省级教坛新星和省市级名师等。

本册由程基本编写。

向中学生介绍科学思维方法是一种新的教学尝试,尽管书中许多内容是我们长期教学研究的心得和成果,但编写过程中仍有力不从心的感觉,甚或有构思不完善及错误之处。因此,恳请读者在使用中不吝指正,以期再版时修订。
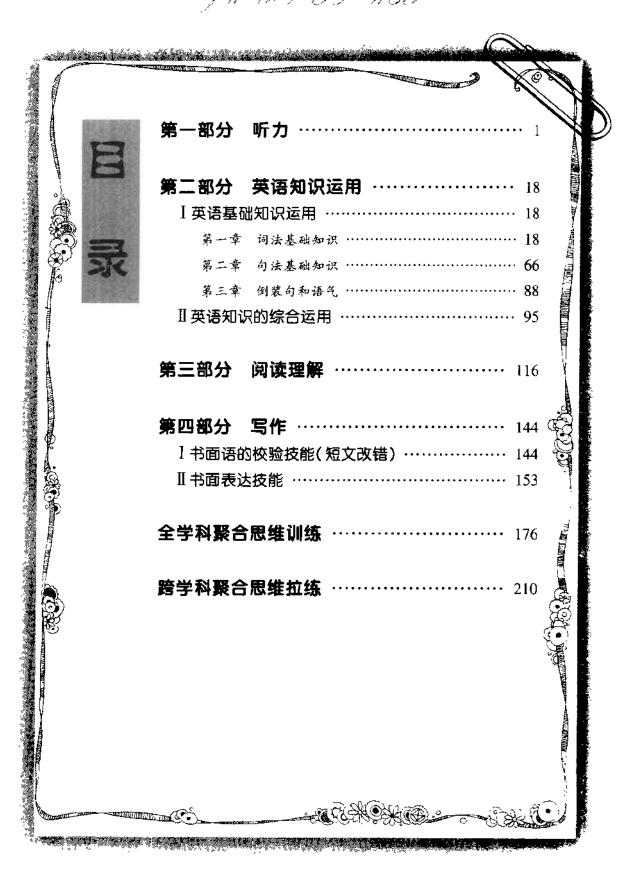
郁祖权

2001 年 11 月 1 日

《英语》聚合思维方法释义

【**联想猜测法**】 依据英语题目中的某些语言特征、故事情节或图表展开合理的联想,悟出其中隐含意思的思维方法。在听力、阅读理解和看图表写作时,恰当地使用这种方法便于把握语言材料。

【**比较分类法**】 对具有共性的语言材料进行分类、比较,从而理解它们的共性和区别的思维方法。在复习动词词组、介词短语和一些易混淆的语言现象时常用这种方法。

【**一般特殊法**】 在把握常见语言现象的同时,注意其某些特殊方面,从而达到全面掌握字、句的用法的思维方法。在复习语法、词法和句法时运用这种方法,既可掌握它们的一般性规则,又能注意其特殊用法。

【**分析综合法**】 利用语法知识和语言材料进行分析概括,从而得出所需信息的思维方法。在做听力题、单选题、完形填空题、阅读理解题和改错题时,运用这种方法易选出最佳答案。

【**抽象概括法**】 根据英语语言材料的表面理解,推测出其中的抽象含意;或者根据语言表层的理解概括反映其本质的思维方法。在做听力题和阅读理解题时,运用这种方法便于领悟题目的本意。

【**归纳演绎法**】 对一些分散学习的具有规律性的语言规则,或分散的语言情景进行归纳总结,从而得出相应的结论的思维方法。常用于复习语法、词法和句法,以及阅读理解和写作中。

【**建模化归法**】 把一些语言现象建立一定的模式,或者按照其用途化归成不同的组别,使一些抽象的语言现象变得形象而具体的思维方法。在复习固定句型、语法规则以及交际英语时可以采用这种方法。

【**类比映射法**】 由一种语言现象联系到其它类似的语言现象,或者利用英语文字工具去获取其它学科相关知识信息的思维方法。在做全学科练习和跨学科练习时常用这种方法。

聚合思维

目录

第一部分

听力

知识经纬

按照教育部考试中心规定,从 2002 年起教育部考试中心将提供听力部分权重占 20%(30 分)的高考英语试卷,从而体现对考生听、说、读、写四项技能的全面考查,实现把外语作为工具课、技能课教学的目标。考生若想提高听力,除了平时多听多练,还应了解听力题内容和题目的设置规律,并掌握一定的技巧。

听力内容	对话和独白	
题目设置范围	数词——	基数词和序数词的各种用法
	地点和情景——	推测对话发生的地点、时间和背景
	职业和关系——	猜测对话双方的职业或相互间的关系
	观点和态度——	推测说话者的观点和态度以及文章主旨

三点聚焦

高考英语听力测试分设两节共 20 小题,第一节共 5 段对话,每段对话设一个问题,录音只放一遍;第二节含 5 段对话或独白,共设 15 小题,录音放两遍。《教学大纲》和《考试说明》要求考生在 20 分钟左右的时间内完成这 20 道合计 30 分的题目。

听力的重点和热点是要求考生能听懂日常生活中简短的对话和独白,理解说话者的意图和观点,获取事实性信息,并推断会话发生的背景及说话者之间的关系;难点是考生必须在有限的时间内对听到的信息快速处理,筛选出题目所需的信息,尤其是多种数据之间的计算和转换问题,要求考生思维要敏捷。

聚合思维导航

思 维 方 法

听力题涉及面较广,如:日常生活、文化教育、风土人情、人物、科普等。虽然其语言难度低于阅读理解材料,但听者见不到文字。另外,许多题目的设置较灵活,并不是听到什么材料就问什么,而是需要把听到的信息加以处理、转换或概括方可选出最佳选项。故考生宜着重采用

发散思维和聚合思维相结合的思维方式。听对话时宜采用发散思维来联想和猜想对话发生的地点、时间以及说话者之间的关系;听独白材料时宜采用聚合思维方式,从而概括出独白的大意、作者的意图和态度。

【联想猜测法】

范例 1 How did the man go for the holiday?
        A. By train.   B. By ship.   C. By air.
思路 本题考查的中心是采用哪种交通方式去度假,对话中的"took a plane"是一个暗示语,故选 C。
思维亮点 从选项设置可以猜想对话双方肯定是在谈论有关交通方式的问题,听的时候要有意识地注意交通工具方面的词汇。

范例 2 At what time do they set off?
        A. At 9:15 a. m.   B. At 9:00 a. m.   C. At 7:30 a. m.
思路 本题很明显是考时间的选择,对话中 half past seven 这一时间的表达法告诉我们应选 C。
思维亮点 从选项设置可以联想到此题关注的是具体时间及其表达法,听的时候要善于把时间的几种表达法进行转换。类似这种转换的还有分数和百分数,数学之间的加、减、乘、除换算等。

【比较分类法】

范例 1 What did he think of the people in the country?
        A. They were kind.   B. They were strange.   C. They were tall.
思路 从 A、B、C 三个选项可以看出,题目设计者把这个国家的人分成三类。要求听者根据对话内容确定究竟属于哪一类人。对话中的"friendly"一词告诉我们应选 A。
思维亮点 比较三个选项,不同的是 be 动词之后的形容词,这三个不同的形容词是描述人的,听的时候要特别关注反映人的词语。做这类题时要快速比较选项,找到不同点。

范例 2 What was the weather like there?
        A. It was fine.   B. It was terrible.   C. It was cold.
思路 比较 A、B、C 三个选项,不同处是三个形容词,要求听者确定哪一个描述是正确的。对话中"raining hard"和"a big flood"告诉我们应选 B。
思维亮点 三种不同类型的天气肯定有相应的描述语,听的时候要善于抓住这些词语。

【抽象概括法】

范例 1 What did the man mean?
        A. He would rather go fishing.
        B. He wanted to go there.
        C. He would rather go nowhere.
思路 题目要求听者理解 the man 的说话意图,对话中的"prefer to stay in"告诉我们 C 是最佳选项。

思维亮点　本题关注的是说话者 the man 的意图,对话并没有直接告诉我们,而是要根据听到的某些关键词语加以概括和推测方可确定出最佳选项。听力题的独白材料常常需要用这种方法。

聚合思维集训

【联想猜测法】

A)听下面每段对话,回答每段对话后的问题,每段对话仅读一遍。

1. How old is David's brother?
   A. About 28.　　　　　B. About 38.　　　　　C. About 48.
2. What language does Mike speak?
   A. English.　　　　　B. French.　　　　　C. Both English and French.
3. Where does the man live?
   A. In New York.　　　　B. In Washington.　　　　C. In Boston.
4. When will the boy leave?
   A. Next week.　　　　B. Last week.　　　　C. This week.

【比较分类法】

5. Why can't the woman go out?
   A. She has to stay with her mother.
   B. She has to help her younger brother.
   C. She has to do her homework.
6. Who is Jack?
   A. He's their student.　　　B. He's their son.　　　C. He's their friend.
7. How is Jean?
   A. She's happy.　　　　B. She's sick.　　　　C. She's sad.

【抽象概括法】

8. What's the relationship between them?
   A. Husband and wife.
   B. The policeman and driver.
   C. The customer and shop-assistant.
9. What can we learn about Bill?
   A. He wants to change his job.
   B. He's doing quite well.
   C. He doesn't like his job.
10. What do you think of the man?
    A. He's good at English.

B. He sells China Daily every day.

C. He often helps the woman.

11. What does the man mean?

A. His feet are hard to measure.

B. They hardly get a foot of snow.

C. He has never seen so much snow here.

B)听下面两段对话,回答 12—15 四个问题,每段对话读两遍。

【联想猜测法】

12. How much does he want to borrow?

A. $33.　　　　B. $123.　　　　C. $103.

13. What does the Grand mean?

A. A theatre.　　　　B. A restaurant.　　　　C. A station.

【比较分类法】

14. What does the woman like about Britain?

A. Weather and people.

B. People, TV and radio station.

C. The sun.

15. Why does the woman dislike the weather there?

A. It's too cold.　　　　B. It's not sunny.　　　　C. It's too hot.

C)听下面一段独白,回答 16—24 题。录音读两遍。

【抽象概括法】

16. What do you know about Hellen?

A. She couldn't hear very well.

B. She was blind.

C. She was short-sighted.

17. When she began to go out with a young man, _____

A. she often wore glasses.　　B. she never wore glasses.　　C. she wore glasses sometimes.

18. Jim must be Hellen's _____

A. elder brother.　　　　B. husband.　　　　C. boy friend.

19. Hellen became short-sighted when _____

A. she was a little girl.　　　B. she was seventeen.　　　C. she was with Jim.

20. She didn't wear her glasses when she was with Jim because _____

A. she looked prettier to Jim.

B. Jim looked better to her.

C. both Hellen and Jim looked better to each other.

答案及听力录音稿

A) 参考答案

1. C   2. C   3. B   4. A   5. B   6. B   7. B   8. B   9. B   10. A   11. C   12. C   13. B   14. B   15. B   16. C
17. B   18. C   19. A   20. C

B) 录音稿

1. W: David, how old is your brother?
   M: He's 10 years older than I. I'm over 40.

2. W: All people who are born in the USA speak English.
   M: Yes, but Mike can speak French, too.

3. W: Are you glad to have come to Washington?
   M: Yes. I'd considered going to New York or Boston, but I've changed my mind.

4. M: Has the boy decided when to leave?
   W: Yes, he'll leave next week.

5. M: Let's go shopping tonight.
   W: That sounds good, but I've to help my little brother with his lessons.

6. M: Where's Jack?
   W: I think he is in bed, but he might be in the bathroom.

7. M: What's wrong with you, Jean? You look pale.
   W: I've been to the clinic. I can't go to school.

8. M: Excuse me.
   W: Yes?
   M: You can't park here.
   W: But it's only a few minutes. I'm waiting for a friend.
   M: This is only a taxi rank. You can park in the car park round the corner over there.

9. W: How is Bill doing? Is he doing all right?
   M: He's doing fine now. He planned to change his job for a while but finally didn't.

10. M: Work is finished. It's time to go.
    W: What are you going to do after work?
    M: I'm going to buy today's China Daily to read.
    W: What's it?
    M: It's a kind of newspaper in English.

11. W: Do you get as much as a foot of snow here?
    M: Hardly ever.

12—13. M: Will you lend me some money?
       W: How much are you going to need?
       M: 103 dollars. I'm going to take Mary to the Grand. She is an expensive girl. She eats like a horse.

14—15. M: How do you like the weather in Britain?
       W: Oh, I don't like the weather, but I like the people here. They are so friendly. The TV and radio stations are good, too. What's more, the air is so fresh.
       M: Right. There's too much rain here.
       W: Oh, yes. I love the sun, but I can't see the sun very often here.

16—20. Hellen's eyes were not good, so she usually wore glasses. But when she was 17, she began to go out with a young man. She never wore glasses when she was with him. When he came to the door to take her out,

she took her glasses off, and when she came again and left, she put them on.

One day her mother said to her, "But Hellen, why do you never wear glasses when you don't see anything?"

"Well, mother," said Hellen, "I look prettier to Jim when I am not wearing my glasses — and he looks better to me too!"

附:听力综合测试题

(一)

第一节　听下面五段对话。每段对话后有一小题,从题中所给的 A、B、C 三个选项中选出最佳选项,并标在试卷的相应位置。听完每段对话后,你都有 10 秒钟的时间来回答有关小题和阅读下一小题。每段对话仅读一遍。

【比较分类法】

1. What does the woman like doing ?
   A. Watching the football games.　B. Watching TV.　C. Reading books.
2. What does the woman ask the man to do?
   A. Wait for 10 minutes.　　B. See her in 10 minutes.　C. Go to another café.
3. What's the weather like?
   A. Rainy.　　　　　B. Foggy.　　　　　C. Fine.
4. What's the woman asking about?
   A. Where she can find a lift.
   B. The way to the teacher's office.
   C. Whether there is a lift.
5. Where are the mother and the son now probably?
   A. In a boat.
   B. On the sea.
   C. In the swimming-pool.

第二节　听下面五段对话或独白。每段对话或独白后有几个小题,从题中所给的 A、B、C 三个选项中选出最佳选项,并标在试卷的相应位置。听每段对话或独白前,你将有时间读各个小题,每小题 5 秒钟;听完后,各小题将给出 5 秒钟的作答时间。每段对话或独白读两遍。

听第 6 段材料,回答第 6 至 8 题。

【联想猜测法】

6. What are they talking about?
   A. Where they went last night.
   B. What they did last night.
   C. Why they had to stay at home.
7. Who stayed at home last night?

A. The hoy and his parents.

B. The girl and her brother.

C. The boy and his brother.

8. What do we know about the hoy?

A. He did baby-sitting last night.

B. He doesn't like watching tennis match.

C. He had to stay at home although he didn't want to.

听第 7 段材料,回答第 9 至 11 题。

[综合分析法]

9. Who are they talking ahout?

A. The man's son.　　　　B. The woman's son.　　　　C. Their friend's son.

10. How long does the hoy usually stay at school every day?

A. About 8 hours.　　　　B. More than 12 hours.　　　　C. Nearly 12 hours.

11. Why does the boy walk to school?

A. He enjoys walking and talking with his friends.

B. His father can drive him to school every day.

C. There isn't a bus on his way to school.

听第 8 段材料,回答第 12 至 14 题。

12. Where are they talking?

A. In the kitchen.　　　　B. At a shop.　　　　C. In the dining room.

13. What are they talking ahout most probably?

A. A radio.　　　　B. A telephone.　　　　C. A television.

14. What do we learn from this conversation?

A. The woman only wants to buy something cheap.

B. If we pay hy check, it will cost less.

C. The woman doesn't want very good sound.

听第 9 段材料,回答第 15 至 17 题。

15. What's the most prohable relationship between the lady and the boys?

A. They are mother and sons.　　B. They are neighbours.　　C. They are strangers.

16. What may be a help to them?

A. A key.　　　　B. A rope.　　　　C. A ladder.

17. Why do you think the policeman is coming this way?

A. He wonders what's happening here.

B. He wants to help the kids.

C. He wants to stop them breaking the window.

听第10段材料,回答第18至20小题。

【抽象概括法】

18. What is this speech mainly about?
    A. Why we sleep.   B. How we sleep.   C. When we sleep.

19. Which of the following forms the correct sleep cycle?
    A. active sleep — passive sleep -- dream — active sleep
    B. active sleep — dream — passive sleep – active sleep
    C. passive sleep — active sleep — dream — passive sleep

20. Why do we need both kinds of sleep?
    A. We need good health.
    B. We need rest of our body.
    C. We need to be active.

(二)

第一节 听下面五段对话。每段对话后有一个小题,从题中所给的 A、B、C 三个选项中选出最佳选项,并标在试卷的相应位置。每段对话仅读一遍。

【比较分类法】

1. In which season does it often rain in this area?
    A. In the summer.   B. In the winter.   C. In the autumn.

2. What would Mr Li like to drink?
    A. A cold beer.   B. A coke.   C. Nothing.

3. How much did the woman pay altogether ?
    A. 50 dollars.   B. 48 dollars.   C. 52 dollars.

4. Where can the woman change for the No. 16 bus to the university ?
    A. Right here.   B. At Bridge Street.   C. By the university.

5. Where does the conversation probably take place?
    A. At the shop.   B. At the airport.   C. At the railway station.

第二节 听下面五段对话或独白。每段对话或独白后有几个小题,从题中所给的 A、B、C 三个选项中选出最佳选项,并标在试卷的相应位置。每段对话或独白读两遍。

听第六段材料,回答第 6、7 题。

【联想猜测法】

6. How does frozen food taste?
    A. It is fine.
    B. It tastes terrible.
    C. It tastes better than fresh food.

7. Why do we think that frozen foods are convenient?

A. Because we can shop every day.

B. Because we can shop every two or three weeks.

C. Because we needn't shop any more.

听第7段材料,回答第8至10题。

8. What is the man going to do?

    A. To buy a house.   B. To rent a house.   C. To paint a house.

9. What is not included in the 200 dollars?

    A. Gas.   B. Heat.   C. Gas and heat.

10. When will the man have to pay some more money for that?

    A. When he signs one copy.

    B. When he gets the key to the house.

    C. When the price of oil increases.

听第8段材料,回答第11至13题。

【综合分析法】

11. How is Li Lei?

    A. Tired.   B. Not bad.   C. Fine.

12. What does the woman think of Li Lei's English?

    A. She thinks that his English is very good.

    B. She thinks his English needs improving.

    C. She thinks his English is not good.

13. What is probably the relationship between the two speakers?

    A. They are friends.

    B. They are strangers.

    C. They are brother and sister.

听第9段材料,回答第14至16题。

14. Where is the city of Williamsburg?

    A. In the south of the country.

    B. In the north of the country.

    C. Outside the country.

15. Why doesn't the woman like the tour?

    A. Because she thinks that it is too expensive.

    B. Because she thinks that it is too long.

    C. Because she thinks that it is organized.

16. What does the woman think of the suggestion?

    A. It's good.

    B. It's terrible.