

# Chapter One: WHAT IS VARK?

## WHAT ARE LEARNING STYLES?

The term learning style is frequently used in schools, universities and colleges and there are a variety of books about it. A learning style refers to an individual's preferred ways of gathering, organizing, and thinking about information<sup>1</sup>. There are various authors who have written about different types or categories within the field of learning styles.<sup>2</sup> VARK is in the category of *perceptual modes*, which means that it is focused on the different ways that students take in and give out information. Learners have a preferred learning style and one part of that learning style is their profile of preferences for the intake and the output of ideas and information.

No student or teacher is restricted to only one mode for communication intake and output. Even so, it is interesting to note that there are some dominant preferences and some voids (zero scores on a preference) among different students and teachers. Some students and teachers exhibit not only a strong preference for one particular mode but also relative weaknesses in other modes. For taking in our environment we use our senses - sight, hearing, taste, touch and smell. In academic learning we usually use our sight, our speech and our hearing with less importance placed on taste, touch and smell. Some learners like to use all their senses at once by experiencing their learning and this uses our kinesthetic preferences.

The power of VARK is that students and teachers understand it intuitively and it seems to fit best practices. It provides a useful way, therefore, to begin a discussion about learning styles.

## WHY VARK?

The acronym VARK stands for **V**isual, **A**ural, **R**ead/Write, and **K**inesthetic. These are the sensory modalities that are used for *learning* information. When we are teaching in schools, universities and colleges these categories seem to reflect the experiences of our students. Although there is some overlap between them, for the purposes of this book, they are defined as follows.

### **Visual (V):**

This preference includes the depiction of information in charts, graphs, flow charts, and all the symbolic arrows, circles, hierarchies and other devices that teachers use to represent what might have been presented in words. Layout, whitespace, headings, patterns, designs and color are important in establishing meaning. Learners with a strong Visual preference are more aware of their immediate environment and their place in space. It does not include pictures, movies, videos and animated websites (simulation) that belong with Kinesthetic below.

### **Aural (A):**

This perceptual mode describes a preference for information that is spoken or heard. Learners with this modality report that they learn best from discussion, oral feedback, email, cellphone chat, texting, discussion boards, oral presentations, classes, tutorials, and talking with other students and teachers.

### **Read/Write (R):**

This preference is for information displayed as words either read or written. Typically it means those who prefer textbooks. Not surprisingly, many academics and high-achieving learners have a strong preference for this modality. These learners place importance on precision in language and are keen to use quotes, lists, texts, books and manuals. They have a strong reverence for words.

### **Kinesthetic (K):**

By definition, this modality refers to the "*perceptual preference related to the use of experience and practice (simulated or real).*" Although such an experience may use other modalities, the key part of any definition is that the learner is connected to reality, "*either through experience, example, practice or simulation,*" It is often referred to as "*learning by doing*" but that is an oversimplification especially for school, college and university learning which is often abstract. It can still be made accessible for learners with a kinesthetic preference. This mode uses many senses (sight, touch, taste and smell) to take in their environment and to experience and learn new things. Some theorists believe that movement is important for this mode but it is the reality of the situation that appeals most.

<sup>1</sup> Davis, 1993, p. 185

<sup>2</sup> Murrell and Claxton (1987) categorized learning styles into four groups: models that focus on 1) personality characteristics (e.g., extrovert v. introvert); 2) information processing (e.g., a holistic v. a sequential approach); 3) social interaction, how students behave and interact in the classroom e.g., learning oriented v. grade oriented); and 4) instructional preference, the medium in which learning occurs (e.g., graphic representation, listening, reading, or direct experience). VARK is clearly an example of the instructional preference category.

## 2 How Do I Learn Best?

Before you read any further you should complete the 16 questions below. It is not a test, but it will make more sense of what you are about to read. There are some instructions at the top of the questionnaire. Not everybody reads them. The most important instruction is that you may have **more than one answer** to any of the questions. It will be somewhat more interesting if you limit yourself to one answer per question or maybe two, but that is your choice. Please fill in the questionnaire even if you have filled it in before. Just one more time! If you prefer to complete the questionnaire online go to [www.vark-learn.com](http://www.vark-learn.com) get your scores and return to the section on *Scoring* on page 4.<sup>3</sup>

The VARK questionnaire indicates your preferences for the way you work with information. Choose the answer which best explains your preference and circle the letter next to it. Please circle more than one answer if a single answer does not match your perception. Leave blank any question that does not apply. When you have completed the questionnaire you should fill in the boxes on page 3 and record your profile of preferences.

### THE VARK QUESTIONNAIRE

Choose the answer which best explains your preference and circle the letter(s) next to it. **Please circle more than one** if a single answer does not match your perception. Leave blank any question that does not apply.

1. You are helping someone who wants to go to your airport, town centre or railway station. You would:
  - a) draw, or give her a map.
  - b) tell her the directions.
  - c) write down the directions (without a map).
  - d) go with her.
  
2. You are not sure whether a word should be spelled 'dependent' or 'dependant'. You would:
  - a) see the word in your mind and choose by the way they look.
  - b) think about how each word sounds and choose one.
  - c) find it in a dictionary.
  - d) write both words on paper and choose one.
  
3. You are planning a holiday for a group. You want some feedback from them about the plan. You would:
  - a) use a map or website to show them the places.
  - b) phone, text or email them.
  - c) give them a copy of the printed itinerary.
  - d) describe some of the highlights.
  
4. You are going to cook something as a special treat for your family. You would:
  - a) look through the cookbook for ideas from the pictures.
  - b) ask friends for suggestions.
  - c) use a cookbook where you know there is a good recipe.
  - d) cook something you know without the need for instructions.
  
5. A group of tourists want to learn about the parks or wildlife reserves in your area. You would:
  - a) show them internet pictures, photographs or picture books.
  - b) talk about, or arrange a talk for them about parks or wildlife reserves.
  - c) give them a book or pamphlets about the parks or wildlife reserves.
  - d) take them to a park or wildlife reserve and walk with them.
  
6. You are about to purchase a digital camera or mobile phone. Other than price, what would most influence your decision?
  - a) It is a modern design and looks good.
  - b) The salesperson telling me about its features.
  - c) Reading the details about its features.
  - d) Trying or testing it.

7. Remember a time when you learned how to do something new. Try to avoid choosing a physical skill, e.g. riding a bike. You learned best by:
  - a) diagrams and charts - visual clues.
  - b) listening to somebody explaining it and asking questions.
  - c) written instructions – e.g. a manual or textbook.
  - d) watching a demonstration.
  
8. You have a problem with your knee. You would prefer that the doctor:
  - a) showed you a diagram of what was wrong.
  - b) described what was wrong.
  - c) gave you a web address or something to read about it.
  - d) used a plastic model of a knee to show what was wrong.
  
9. You want to learn a new program, skill or game on a computer. You would:
  - a) follow the diagrams in the book that came with it.
  - b) talk with people who know about the program.
  - c) read the written instructions that came with the program.
  - d) use the controls or keyboard.
  
10. I like websites that have:
  - a) interesting design and visual features.
  - b) audio channels where I can hear music, radio programs or interviews.
  - c) interesting written descriptions, lists and explanations.
  - d) things I can click on, shift or try.
  
11. Other than price, what would most influence your decision to buy a new non-fiction book?
  - a) The way it looks is appealing.
  - b) A friend talks about it and recommends it.
  - c) Quickly reading parts of it.
  - d) It has real-life stories, experiences and examples.
  
12. You are using a book, CD or website to learn how to take photos with your new digital camera. You would like to have:
  - a) diagrams showing the camera and what each part does.
  - b) a chance to ask questions and talk about the camera and its features.
  - c) clear written instructions with lists and bullet points about what to do.
  - d) many examples of good and poor photos and how to improve them.
  
13. Do you prefer a teacher or a presenter who uses:
  - a) diagrams, charts or graphs.
  - b) question and answer, talk, group discussion, or guest speakers.
  - c) handouts, books, or readings.
  - d) demonstrations, models or practical sessions.
  
14. You have finished a competition or test and would like some feedback. You would like to have feedback:
  - a) using graphs showing what you had achieved.
  - b) from somebody who talks it through with you.
  - c) using a written description of your results.
  - d) using examples from what you have done.
  
15. You are going to choose food at a restaurant or cafe. You would:
  - a) look at what others are eating or look at pictures of each dish.
  - b) ask the waiter or friends to recommend choices.
  - c) choose from the descriptions in the menu.
  - d) choose something that you have had there before.

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16. You have to make an important speech at a conference or special occasion. You would:
- make diagrams or get graphs to help explain things.
  - write a few key words and practise saying your speech over and over.
  - write out your speech and learn from reading it over several times.
  - gather many examples and stories to make the talk real and practical.

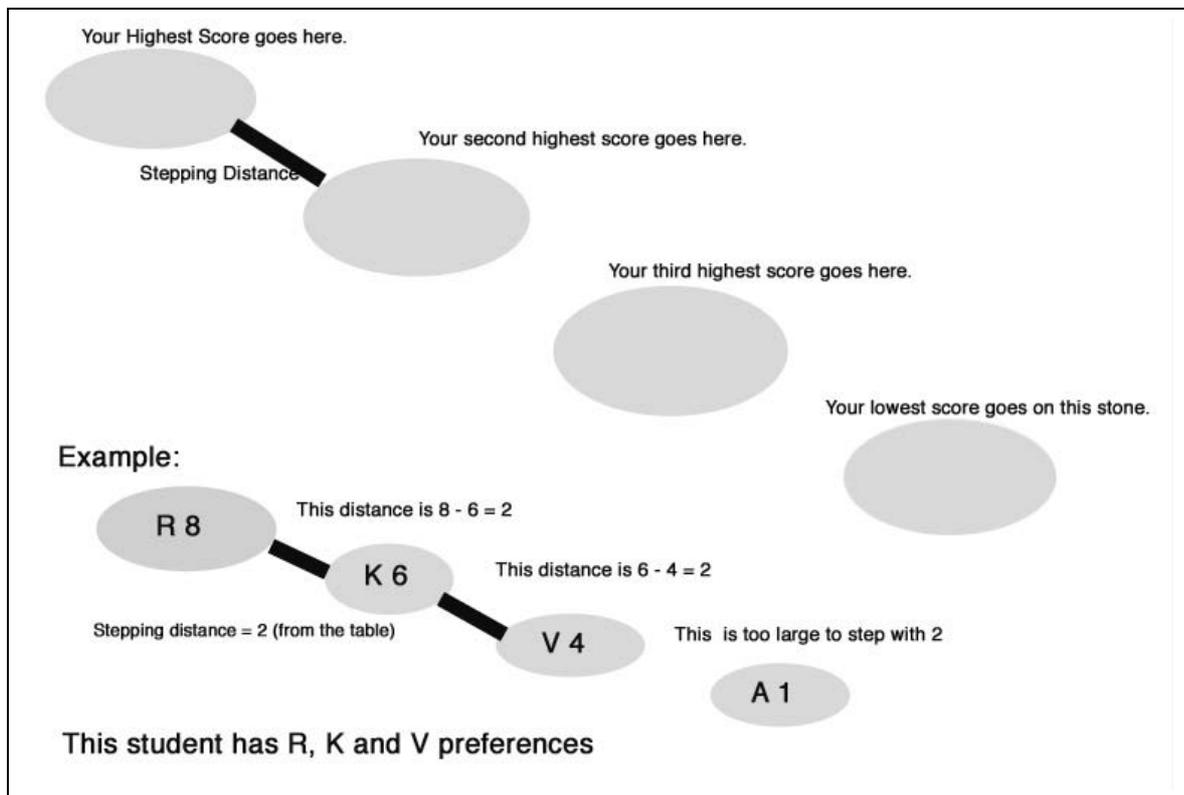
Please fill in these boxes to record your profile of preferences.

Count the	a)	b)	c)	d)
Total for the questionnaire	<input style="width: 40px; height: 30px;" type="text"/>			
	<b>V</b>	<b>A</b>	<b>R</b>	<b>K</b>

You will need the total of your four scores. The total of my four scores is:

**SCORING**

Because you could choose more than one answer for each question, the scoring is not just a simple matter of counting. It is like four stepping-stones across some water. Enter your scores **from highest to lowest** on the four stones below. Now add their V, A, R, and K labels beside them on the stone.



Your stepping distance comes from this table.

The total of my four VARK scores is -	My stepping distance is
14-21	1
22-27	2
28-32	3
More than 32	4

**FOLLOW THESE STEPS TO ESTABLISH YOUR PREFERENCES.**

**Step One** Your first preference is always your highest score so tick (check) that first stone as one of your preferences.

**Step Two** Subtract your second highest score from your highest score. If the answer is larger than your stepping distance go to the paragraph on the next page titled: *What is the strength of my single preference?* If not, tick this stone as a second preference and continue with **Step Three** below.

**Step Three** Subtract your third highest score from your second highest. If the answer is larger than your stepping distance go to the paragraph titled: *Bi-modal Preferences.* If not, tick this stone as a third preference and continue with **Step Four** below.

**Step Four** Lastly, subtract your fourth highest score from your third highest. If the answer is larger than your stepping distance go to the paragraph headed: *Tri-Modal Preferences.* Otherwise, tick your fourth stone as another preference and read the paragraph titled: *All Four are Preferences!*

**BI-MODAL PREFERENCES**

If you checked two preferences you are bi-modal. You are also part of the large group who are multimodal – those who have more than one preference. Your preferences will be one of the combinations below.

VA VR VK AR AK RK

An example:

Marcelo	Total score = 16	3	3	5	5
	Stepping Distance = 1	V	A	R	K

Marcelo has a *bi-modal* preference for Read/write and Kinesthetic. Now go to the paragraph titled: *What is Normal?*

**TRI-MODAL PREFERENCES**

If you checked three preferences you are tri-modal. You are also part of the larger group who are multimodal – those who have more than one preference. Your preferences will be one of these combinations below.

VAR VAK VRK ARK

An example:

Adam	Total scores = 22	8	7	1	6
	Stepping Distance = 2	V	A	R	K

Adam is multimodal with three preferences (V, A and K). His strongest choice (V) is little different from his others (A and K). Now go to the paragraph titled: *What is Normal?*

**ALL FOUR ARE PREFERENCES!**

You have checked all four modes (V, A, R and K). They are of similar importance among your preferences for information input and output. You are part of the large group who are multimodal – those who have more than one preference. Now go to the paragraph titled: *What is Normal?*

**WHAT IS THE STRENGTH OF MY SINGLE PREFERENCE?**

Total number of responses?	The difference between my highest score and my next highest score is? Ties = 0			
Up to 21	6+	4 or 5	2 or 3	0 or 1
22-27	7+	5 or 6	3 or 4	Less than 3
28-32	8+	6 or 7	4 or 5	Less than 4
33+	9+	7 or 8	5 or 6	Less than 5
	You have a <b>Very Strong</b> Preference	You have a <b>Strong</b> Preference	You have a <b>Mild</b> Preference	You have no single preference. You like to use all four

This paragraph is for those who have a **single** preference. They have their highest score well above the others. How much it stands out decides whether it is a *Mild, Strong or Very Strong* single preference and the answer depends partly on the total number of responses chosen in the questionnaire. If you have chosen 14 to 21 options in the questionnaire, a score for your highest preference that is six or more ahead of any other score would indicate a *very strong* preference. A difference of only two points between your top two scores would indicate a *mild* preference. If you have chosen 33 or more responses to the 16 questions a *very strong* preference would need to be at least nine (9) ahead of your next highest preference. The table below identifies the strength of your single preference.

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The strength of my single preference is - (check one)

*Mild*

*Strong*

*Very strong*

### Two Examples

Laura Total number of responses = 17  
Stepping Distance =1

10	3	2	2
V	A	R	K

Laura's total number of responses (17) can be read in the row of the table on page 5 headed "Up to 21" and the difference between her highest score (V = 10) and her next highest (A = 3) is 7. So she has a **Very Strong** Visual preference.

Vicki Total number of responses = 27  
Stepping Distance =2

5	4	6	12
V	A	R	K

Vicki has a **Strong** Kinesthetic (K) preference because her total score fits the line "22-27" in the table on page 5 and the difference between her two highest scores is 6.

### WHAT IS NORMAL?

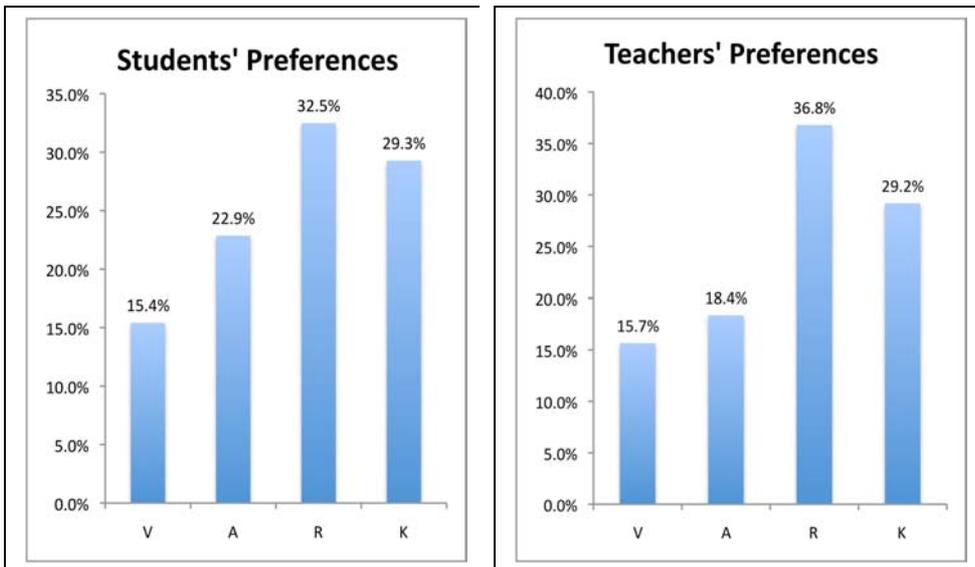
There is nothing normal about preferences for communication modes just as there is nothing normal about your favorite foods, cellphones or movies. Data from our website provides the following information indicating the percentage for each of the 15 different VARK possibilities.<sup>4</sup> Remember this data is skewed towards those who used the Internet so it is not necessarily a "normal" distribution.

Multiple preferences		Single preferences	
VAR	34.0%	V	2.8%
VRK	2.8%	A	6.6%
VAK	2.4%	R	17.4%
VAR	0.8%	K	11.6%
ARK	6.1%	Subtotal	38.4%
VR	1.3%		
VA	0.4%		
VK	2.4%		
AK	4.0%		
RK	4.1%		
AR	3.3%		
Subtotal	61.6%		

In a group of 30 students this website data would indicate that:  
 18 students would be multimodal.  
 One student would prefer the Visual mode.  
 Two students would prefer the Aural mode.  
 Five students would prefer the Read/write mode and  
 Four students would prefer the Kinesthetic mode.  
 and  
 the teacher would probably have a Strong Read/write preference!

If the same data were rearranged to show the percentages of respondents who had some Visual, or Aural, or Read/write or Kinesthetic preference there are some interesting comparisons. For example, in the graph below, the percentage that has some Visual preference includes all those with a Visual *single preference* and also those who have Visual as part of their *multimodal preferences*. This is also done for the other modes.

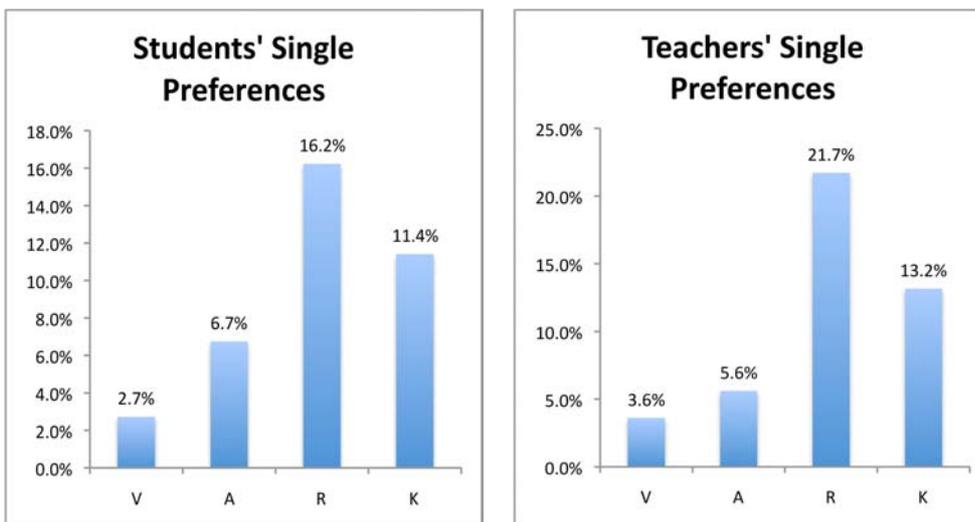
<sup>4</sup> The website will have more up-to-date data in the section titled, *What's New*.



The students have a larger proportion than teachers for Aural. The teachers are proportionately *stronger* on Read/write. For Visual and Kinesthetic they are very similar. Notice the high percentage for Read/write and Kinesthetic in both graphs. These differences will be discussed later but it is interesting that students and teachers may not be similar in their modal preferences. How will this affect teaching and learning?

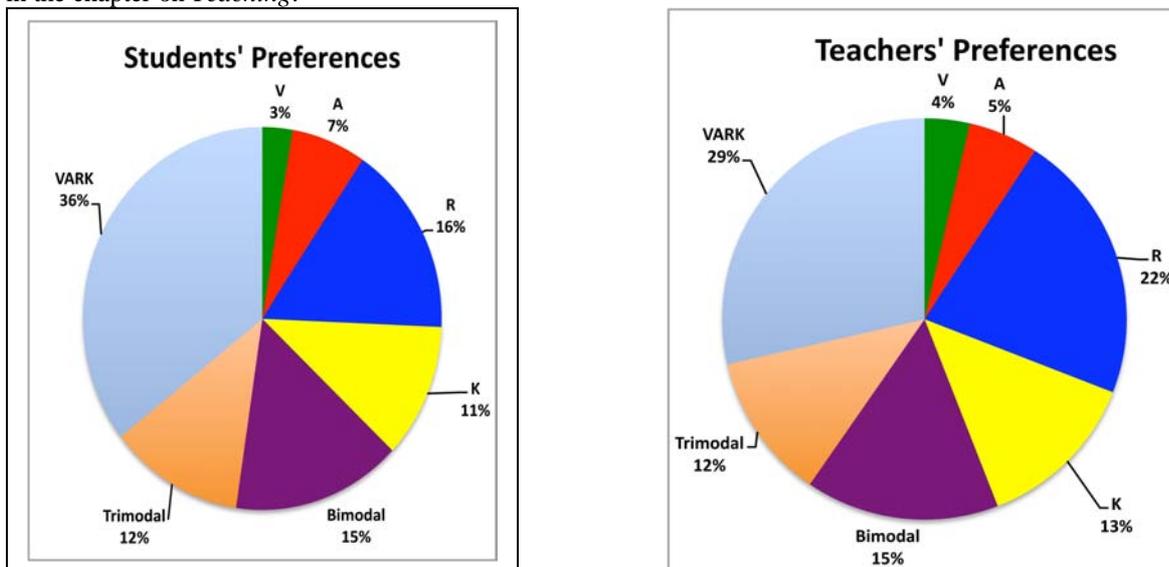
**SINGLE PREFERENCES**

In the July 2009 database 38% had single preferences. The remainder (62%) had multimodal preferences. The graphs below show similar patterns to those above but they show only those teachers and students who had single preferences as defined by the VARK algorithm. Read/write is by far the strongest single preference mode for teachers and for students. But one-in-five teachers with a single preference have Read/write as that preference. For both students and teachers the Visual and Aural preferences are much less prevalent though they are still important for teaching and learning. When a student with a Kinesthetic preference and little preference for Read/write meets a teacher with a strong preference for Read/write modes and little preference for Kinesthetic modes what might be the result?



**PROPORTIONS FOR THE VARK MODES.**

The distribution of modes for teachers and students is shown below. The proportions for Read/write and multimodal All-modes (VARK) are the main differences between the two graphs. The implications of these differences are explored in the chapter on *Teaching*.



**WHAT DOES A VOID MEAN?**

If you have a zero or a very low score on any mode it is an interesting part of your VARK profile. We suggest that you should take some time to think about your attitude to that mode. It may indicate that your least-preferred mode is 'disliked', 'not used', 'a problem' or just 'unhelpful' to your learning. Some learners may voice this dislike for that mode by saying, "Why would anyone want to use that...?" It may be worthwhile to read the chapter for that mode to understand why you don't like it. Remember a low score does not mean a low level of skill in that mode. It is possible to dislike something that you are good at. Preferences are not the same as strengths. So don't be upset if you have a low preference for a mode or even two or three modes. In each of the specialist chapters that follow (Chapters 2-5) there is information about having a low preference for that mode.

**OTHER VARK QUESTIONNAIRES**

Since the development of VARK more questionnaires have been developed. There is a Younger version with questions better suited to the experiences of those aged 11-18,<sup>5</sup> a sports' version for coaches, athletes and players<sup>6</sup>. Secondly there are versions in other languages. Check out the website for the growing list of other languages used.

**WHERE TO, NOW?**

If you have a preference for only one mode (a single preference) you should turn to the special chapter with advice about how to use that mode to assist your learning. That chapter will have a variety of strategies for you to use and some explanations about using that mode.

Visual	.	Chapter 2
Aural	.	Chapter 3
Read/Write	.	Chapter 4
Kinesthetic	.	Chapter 5

If you have more than one preference we suggest you first read Chapter 6 that describes the characteristics of "multimodals." Then you can read the chapters that match your multiple preferences (Chapters 2-5). If you have a low score for any mode, go to that chapter and read about what it is like to have a "void" or low score in that mode.

<sup>5</sup> Debra Jones, Cabrillo College, Aptos, California 95003, Charles C. Bonwell and Neil Fleming modified this version of VARK for Younger learners.

<sup>6</sup> Modified by Juli Dunn, Head Athletic Trainer and Associate Professor of Sport Studies & Recreation, Whitman College, Walla Walla, Washington, USA.