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### RC-MAPS: Bridging the Comprehension Gap in EAP Reading

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**RC-MAPS:**  
**Bridging the Comprehension Gap in EAP Reading**

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**Abstract**

In academic environments, reading is not assigned to simply transmit information; students are required to take the information and, based on the task set by the instructor, assess, analyze, and critique it on the basis of personal experiences, prior knowledge, and other readings (Grabe, 2009). Thus, text-based comprehension (Kintsch, 1998) alone is not sufficient for academic success. Top-down processing is also required; this involves applying prior knowledge to define purpose(s), make and verify hypotheses, and infer and question content (Macaro & Erlar, 2008; Urquhart & Weir, 1998). Although research has given teachers direction regarding the approach to use when including strategy instruction in their classrooms, it has been left to teachers to develop the specific teaching tools. This paper proposes RC-MAPS: an instructional technique that provides teachers with an easily modified tool to assist in developing interpretative comprehension skills among L2 readers in academic environments through the strategy of questioning.

## 1. Introduction

Reading is an essential academic skill, but what is reading and how does one do it? I have posed these questions to my TESL class, and while a definition of ‘*what reading is*’ was generally agreed upon, the *how* appeared to be much more difficult to answer. The general consensus when asked ‘what do you *do* when you read?’ was ‘I don’t know; I just read’. In order to teach students how to read, teachers need to be able to articulate not only what is required but more importantly, how to do it.

In academic environments, reading is the basis for much of the knowledge students, both first language (L1) and second language (L2), require to succeed. Students are expected to not only read multiple texts and comprehend them in the sense of determining the writer’s intended meaning, but they must also interpret, that is, analyze, synthesize, and evaluate the texts in order to develop their knowledge base (Grabe, 2009; Grabe & Stoller, 2002). These tasks require interaction with texts and the integration of information within and between texts (Grabe, 2009; Grabe & Stoller, 2002; Kintsch, 1998). Before interaction and integration can occur, however, readers must understand the author’s meaning, or achieve what Kintsch (1998) in his Construction-Integration Model of Discourse Processing has labelled a text-based representation of meaning. The focus/goal of this text-based representation is to identify and organize main ideas and key support in a hierarchical structure. Kintsch (1986) associates this with remembering a text. Armed with a solid text-based level of comprehension, readers are then prepared to interact with and integrate the newly acquired knowledge into their own knowledge base to achieve a more interpretative situation-based representation of meaning (Kintsch, 1998). At the level of situation-based comprehension, the reader transforms information in the text in terms of their own purpose and knowledge base. (Kintsch, 1986).

This level of comprehension is associated with learning from a text (Kintsch, 1986, 1998). Unfortunately, these interpretative comprehension skills are challenging reading skills for many university students.

As English for Academic Purposes (EAP) reading instructors at the college and university levels, most of our students are fluent readers in their L1s. They are able to interact with texts and integrate the information when it is in their mother tongues, so one would expect that they would be able to transfer these skills to their L2. In our experiences, however, this is often not the case. Through the explicit instruction and practice of strategies such as context clue use, rhetorical pattern recognition, and macro and micro idea identification, students are usually able to successfully tackle challenging texts independently and achieve solid text-based comprehension. Yet, many still have difficulty bridging the gap from a more literal text-based comprehension to a more interpretive situation-based comprehension even when what is expected is made explicit.

Through the first author's academic journey and research, she realized that the problem did not lie in the students' understanding of 'what' was being asked of them but rather the problem was in the 'how' to do it. The students know where they need to go; they simply do not have a map to get there. With that realization, she embarked on a quest for a possible solution out of which emerged Reading Comprehension MAP for Situation-based comprehension (RC-MAPS). RC-MAPS is a pedagogical tool intended to be used in EAP classrooms to facilitate and foster interpretative reading comprehension skills in L2 learners. RC-MAPS is a strategy training procedure to help students cope with reading challenging texts and develop strategies for future academic work. It consists of simple, task specific questioning guidelines along with graphic organizers to assist L2 readers in bridging the gap

between text-based and situation-based reading comprehension in academic tasks. RC-MAPS is intended to be used as a modelling tool during explicit questioning instruction and as scaffolding to assist L2 readers in moving from awareness to practice to routine use of task specific, metacognitive questioning strategies.

An important factor in text-based comprehension is an awareness of how texts are structured and organized (Grabe, 2004; Jiang & Grabe, 2007). Graphic organizers (see Appendix A) are visual representations of the organization and interrelationships of the macro and micro hierarchical structures of texts. The use of graphic organizers in both L1 and L2 research has demonstrated their positive effects in learners constructing a text-based level of comprehension (Jiang & Grabe, 2007). As such, they are a common tool in reading classrooms to facilitate the instruction of identifying discourse patterns as a reading strategy (Jiang & Grabe, 2007). To date, graphic organizers have been used successfully to foster text-based comprehension (Jiang & Grabe, 2007), but they have not been applied to situation-based comprehension. Moreover, although situation-based comprehension is required for academic tasks (Grabe, 2009; Grabe & Stoller, 2002), we are unaware of a pedagogical tool with a specific strategic focus on fostering situation-based comprehension; RC-MAPS fills this gap.

In the context of RC-MAPS, graphic organizers are first used as a visual representation of the organizational structure of texts. Furthermore, as Jiang and Grabe (2007) advise, the graphic organizers used in RC-MAPS are specific to rhetorical patterns (see Appendix A). RC-MAPS provides a ‘map’ to guide students from text-based to situation-based comprehension by using graphic organizers in two stages:

1. To scaffold and demonstrate text-based comprehension by paraphrasing and organizing the author’s ideas into their intended hierarchy (thesis, main ideas, supporting details).

2. To scaffold and develop situation-based comprehension through critical questioning and responding to questions.

Through integrating the strategy of critical questioning, RC-MAPS furthers the use of graphic organizers from promoting text-based comprehension to also fostering situation-based comprehension in L2 readers.

## **2. Theoretical Frameworks**

### **2.1 Construction-Integration Model**

Reading comprehension is often seen to consist of two main processing categories: decoding and comprehending (Grabe & Stoller, 2002; Macaro & Erler, 2008). Decoding refers to the identification and processing of basic linguistic units (letter patterns, words, syntactic patterns and semantic propositions); whereas, comprehending involves the integration of information from those knowledge sources to construct or build a mental representation of the entire text (Fraser, 2004; Grabe, 2009; Grabe & Stoller, 2002; Kintsch, 1998; Macaro & Erler, 2008). In comprehending, fluent readers remember the prior propositions and mentally ‘attach’ them to the new propositions to create a mental representation of the author’s meaning (Kintsch, 1998; Koda, 2005; Macaro & Erler, 2008; Urquhart & Weir, 1998). Kintsch (1998) refers to this type of understanding as constructing a text-based representation of meaning. Text-based comprehension is associated with comprehending the words and sentences; it underlies the ability to recall and summarize information given by the author (Kintsch, 1998). Text-based comprehension is typically required in academic settings, but, more importantly, it is also required in order for students to move from summary-type tasks to more difficult interpretative academic tasks such as analyzing, assessing and synthesizing information (Grabe, 2009; Kintsch, 1998).

In academic environments, reading is not assigned to simply transmit information; students are required to take the information and, based on the task set by the instructor, assess, analyze, and critique it in relation to personal experiences, prior knowledge, and/or other readings (Grabe, 2009). Thus, text-based comprehension alone is not sufficient for academic success. Top-down processing is also required and this involves applying prior knowledge to define purpose(s), make and verify hypotheses, infer to fill gaps, and question content (Macaro & Erlar, 2008; Urquhart & Weir, 1998). Readers must be able to integrate and apply prior knowledge to their developing text-based understanding in order to appropriately interpret a text (Grabe, 2009; Kintsch, 1998; Koda 2005). The integration of the text-based understanding with the reader's background knowledge is described by Kintsch (1998) as creating a situation-based representation of meaning. This integration is associated with learning, and the recall of information is reconstructive and conceptually driven (Kintsch, 1998). This is an interpretive process which underlies the ability to analyze, synthesize and evaluate information, all typical tasks in academic settings (Grabe, 2009; Kintsch, 1998). Furthermore, as Grabe (2009) notes, this integration is often achieved through critical questioning.

It is important to note that the quality of the situation-based representation depends not only on the reader's knowledge base but also on the quality (i.e., accuracy and completeness) of the text-based comprehension (Koda, 2005). Moreover, Grabe (2009) states that to achieve an effective integration of text-based with situation-based representations, skilled readers utilize strategies in order to engage their personal needs and goals while reading a text. For example, while reading a difficult text, skilled readers employ multiple strategies, often concurrently, such as reflecting on the content, making inferences to close gaps, and

interpreting the text (Grabe, 2009). Unfortunately, because of the language issues L2 readers are faced with, even those that are fluent, strategic readers in their L1s do not necessarily transfer L1 strategies to the L2 reading context (Clarke, 1980; Heeney, 2005; Macaro & Erler, 2008; Shih, 1992). ESL students often complain that applying what they read to academic tasks is one of the most difficult tasks for them (Fraser, 1989). Thus, teaching students strategies to bridge the gap between constructing a text-based understanding of text and developing an interpretative situation-based understanding is a worthy instructional goal in the EAP reading class.

## **2.2 Direct Strategy Instruction**

Strategies are deliberate, controlled, selected actions that readers employ to achieve comprehension goals effectively and efficiently (Allen, 2003; Carrell, Gajdusek, & Wise, 1998; Heeney, 2005; Macaro & Erler, 2008; Zhang, 2007). Cognitive reading strategies include behaviours such as paraphrasing, summarizing, elaborating, inferencing, and questioning to enhance text comprehension (Allen, 2003; Grabe, 2009; Heeney, 2005; Shih, 1992; Yang, 2006). Implicated in this strategy use is metacognitive knowledge or the reader's awareness of the strategic choices available and their deliberate utilization of one or more strategies to attend to comprehension breakdowns as well as to check, monitor, evaluate, revise, and select cognitive strategies (Salataci & Akyel, 2002).

There are two aspects to metacognition: knowledge and regulation (Carrell et al., 1998). Knowledge incorporates knowing what strategies are available, how to perform them, and why to choose a specific strategy (Carrell et al., 1998). Regulation is the control of the strategies and includes planning, monitoring, testing, revising, and evaluating the effectiveness of the strategies (Carrell et al., 1998). Skilled readers employ cognitive strategies

automatically, but they also engage in metacognition when reading is perceived as challenging (Clarke, 1980; Grabe, 2009; Koda, 2005). L2 readers in academic settings are often tasked with readings that they find difficult. Reading instructors can develop learners' metacognitive awareness along with their repertoire of cognitive strategies to help them succeed in academic environments (Clarke, 1980). Research indicates that direct teaching is the most effective approach to strategy training (Fraser, 1989; Koda, 2005; Grabe, 2009). As Fraser (1989) notes, "Direct teaching refers to the explicit explanation, demonstration, and practice of selected strategies..." (p. 76).

### **3. RC-MAPS: Metacognitive Strategy Training Technique**

RC-MAPS makes use of dual-purpose graphic organizers to first guide students to demonstrate text-based comprehension and then to develop and expand situation-based comprehension. Once students have been introduced to and practiced filling in scaffolded (partially completed by the teacher) graphic organizers that represent the specific discourse structures of the texts (see Appendix A), they are instructed to create the appropriate style graphic organizer for the text (see Jiang & Grabe, 2007 for more detail). Students that create a graphic organizer themselves perform better on content recall tasks than those students that are given a teacher generated one (Jiang & Grabe, 2007).

#### **3.1 A Text-Based Comprehension Lesson with RC-MAPS**

Overall, text-based comprehension requires students to remember propositions (i.e., ideas) and attach them to new propositions as they read (Grabe, 2009; Grabe & Stoller, 2002; Kintsch, 1998). If students are focused on decoding, they tend to take longer to read and forget prior propositions (Grabe, 2009). RC-MAPS allows students to read and write at their own pace to create a written record to refer to. Using RC-MAPS, students graphically organize the macro

and micro propositions (main ideas, supporting details etc.) put forth by the author both during and after reading the text. Students are encouraged to paraphrase the original text and summarize it in point form within their graphic organizers. Having such a written record helps students integrate and recall information and ideas.

The following lesson is one I have used with advanced EAP reading classes. It can easily be modified to lower levels by choosing a level-appropriate text (e.g., instead of a 5-paragraph expository text, beginners could use an 8 – 10 sentence paragraph). When introducing RC-MAPS for the first time, the reading should be at or slightly below students' proficiency level as "...limited language proficiency appears to exert a powerful effect on the behaviours utilized by readers...[and]...limited control over the language 'short circuits' the good reader's system, causing him/her to revert to poor reader strategies when confronted with a difficult ...task in the second language" (Clarke, 1980, p. 206). Additionally, the text should be on a topic previously studied to ensure appropriate background knowledge. Lastly, students should have been taught and should have practiced how to identify and highlight the main ideas and supporting details as well as to make paraphrased, point-form marginal notes.

As the topic of this reading is 'homeopathy' (see Appendix B), students' background knowledge can be activated with a class discussion on current medical issues and trends. For example, I ask, "What do you know about H1N1? SARS? The common cold? How do doctors treat these illnesses? How do people treat themselves? What are the treatment options you are aware of, both here and in your home countries?" After the pre-reading discussion, hand out the reading and ask students to preview the text for the main topic and purpose of the text which should then be followed by a short discussion. Sometimes, this initial reading activity is given as homework in the preceding class.

The students' next task is to read the text more carefully to underline or highlight the main ideas and supporting details in each of the paragraphs. This could also have been given as a homework assignment. In order to monitor and assess the students' text-based comprehension of the text before they use their RC-MAPS, students can work in pairs or small groups to compare and discuss the macro and micro propositions each has identified within the text while creating paraphrased marginal notes for each paragraph. This follow-up activity follows Vygotsky's (1978) Zone of Proximal Development (ZPD) theory in which non-experts can learn from interactions with other non-experts. As well, the teacher can circulate helping groups reach a consensus on comprehension problems; this extension activity also places students in the ZPD because of the interaction with an expert (Vygotsky, 1978). Finally, assessment of the students' comprehension and highlighting can be done by the teacher with each pair/group or as a class with a visual of a 'correctly' highlighted text for comparison and discussion. The collaborative discussion of the highlighting also serves as a means to teach the students to monitor their own understanding of the hierarchical structure of information in the text.

Next, students are instructed to use their marginal notes and highlighting to create a text-based RC-MAPS. Depending on how familiar students are with graphic organizers, scaffolded versions may be used in which students need only fill in some of the missing information as some is already present, thereby, allowing more 'checks' of their hierarchical structure of text propositions. For example, in Appendix A, some information has been filled in for the Chart Style graphic organizer for the Homeopathy text. Finally, to clearly demonstrate text-based comprehension and provide academic task practice, students write a

summary of the article based on their RC-MAPS. These summaries may be peer edited, collaboratively written, and/or handed in for assessment and feedback.

### **3.2 RC-MAPS: Situational Comprehension through Questioning**

After students have constructed a text-based representation, the EAP reading classroom can then begin to focus on situation-based comprehension. Once general information about questioning has been presented, students are introduced to the specific RC-MAPS Questioning Strategy.

First, the students are introduced to the concept of questioning texts and how the reader's purpose and the academic task can affect the types of questions readers want or need to ask (Day & Park, 2005; Grabe, 2009). Readers with varying purposes typically focus on and interpret text information differently: the questions each asks and the answers to them will differ (Grabe, 2009). To illustrate, one can imagine how a house hunter and a thief will read and interpret an MLA house-for-sale listing differently; information that the house is at the end of a cul-de-sac could be interpreted by the house buyer as indicating privacy and quiet while for the thief as isolated and unfrequented at night.

Similarly, academic tasks can require different approaches. For example, in a personal response task, the questions asked by the reader will relate to opinions that are based on personal experiences as well as prior knowledge from friends, family members, and media. In a between-text comparison task, however, there should be no mention of personal experiences; the questions will need to relate only to the texts in the task description. In my experience with RC-MAPS, personal response and position papers are the best tasks to introduce situational RC-MAPS because the students need only look at one text in conjunction with information they already know.

Next, students need to be made aware of the questioning strategy: what is questioning, why use it, and when to use it. Questioning written texts is located in cultural domains (Grabe, 2009; Zhang, 2007). Many ESL/EFL students come from cultures in which the Western notion of questioning experts is not necessarily promoted (Grabe, 2009; Zhang, 2007). Therefore, questioning rules must first be outlined by the teacher and then modelled on the RC-MAPS to provide direction and scaffolding for the strategy. The RC-MAPS Questioning Strategy consists of two rules seen below. These rules have emerged from experience. Often, ESL students will either give a personal response that does not discuss specific information or ideas from the text but only the text's topic on the basis of their own knowledge; or, they will discuss the text with no reference to their own knowledge. Situation-based reading comprehension and academic reading tasks that demand critical thinking require both.

#### **RC-MAPS Questioning Strategy**

**RULE 1:** The questions must directly relate to the specific *content* of the text

**\*RULE 2:** The answers must be in 2 parts: one that uses information from the text and another that uses 'outside' information

*\*outside source(s) are task dependent– your knowledge and/or experiences for a personal response task, but only another text for a cross-text comparison*

### **3.3 A Situation-Based Comprehension Lesson with RC-MAPS**

In order to provide scaffolding, students initially complete the situation-based RC-MAPS with the teacher as a class, next in small groups and/or pairs, and finally, individually. The directions given to students should highlight and reiterate the rules, so their questions and answers adhere to them. Firstly, students are asked to bring out their text-based RC-MAPS. Then, they are shown how to create a space for questions for each paragraph on their RC-

MAPS. This is a simple modification: if students have used an outline style, they should simply make a margin on the left or right (see Appendix C). For charts, students will need to add one more column on the left or right of the existing chart (see Appendix D). And with Mind Maps, students need only add a bubble (in a different shape or colour) to the existing bubbles (see Appendix E).

Secondly, the RC-MAPS Questioning Strategy is explicitly presented and modelled for students. Teachers explain the types of questions and responses that are expected and appropriate for the set task and topic, and they model their own cognitive processes of questioning. Typically, I read the first two sentences out loud and then pause...I then begin to ask (again, out loud) the questions that are applicable for the task. I also answer the questions making sure to refer to both the text and my personal knowledge. Using paragraph one of the Homeopathy text (Appendix B), for example, I say, “The law of similars gives a small dose to treat symptoms. Do I know of any other medical practice that is similar to that? What about vaccines?” Students write the questions I ask on their RC-MAPS at the appropriate propositions (see Appendices C-E). Typically, I model the first paragraph and then the second paragraph is completed by the class with my guidance. The teacher reads the first sentence or two and then asks the class for a question. The suggestions given by the students are discussed with the class: do they follow the two rules? If so, the students write them down on their RC-MAPS. If not, the class makes suggestions as to how to ‘fix’ the proposed questions before they are recorded. In small groups or pairs, students are then assigned the task of continuing to create questions for the text. They discuss and create at least two questions per paragraph and monitor that they answer them by referring to the text and their own knowledge. Before the students begin to question on their own, the teacher again reiterates the two rules that need

to be followed. As students become more familiar and comfortable with questioning, teacher scaffolding can be gradually reduced, so students can independently move from text-based to situational-based comprehension activities.

In addition, research in strategy instruction indicates that evaluation of strategy use is important for its successful implementation (Carrell et al., 1998; Grabe, 2009; Yang, 2002). Evaluation is also a skill, so some focus on teaching students how to independently evaluate their work is necessary. RC-MAPS assists in the development of evaluation skills because there is a written record that can be reviewed and discussed. Once the questions and answers have been completed, they can be posted for the class to see, or groups can exchange papers. Students are then given instructions to assess the questions and answers: Do they follow the rules? If not, how do they not follow the rules and how can they be ‘fixed’? These assessments and suggestions should be shared with the class as a whole with the teacher providing additional input and explicit feedback.

The final task for students to demonstrate their situation-based comprehension is to use some of their questions and answers within a personal response paper. These are written using the RC-MAPS and handed in for teacher assessment and feedback. For the rest of the semester, I generally require that situational RC-MAPS be handed in with all written assignments based on readings. This gives the students regular practice and over time enhances the fluency and skill (or efficiency and effectiveness) with which they can apply questioning strategies for different texts and tasks in the future.

#### **4. Conclusion**

L2 reading is a complex, interactive and integrative process (Heeney, 2005; Kintsch, 1998; Koda, 2005; Urquhart & Weir, 1998). Academic reading often requires more than a text-based

understanding because students are asked to apply the text to different tasks (Heeney, 2005; Shih, 1992; Yang, 2006; Zhang, 2007). Research has demonstrated not only that metacognitive strategy instruction improves reading comprehension (Allen, 2003; Carrell et al., 1998; Fraser, 1989, 1999; Grabe, 2009; Heeney, 2005; Macaro & Erler, 2008; Yang, 2002, 2006; Zhang, 2007), but there is a ‘best practice’ for teachers to follow : namely, using a direct-strategy teaching approach that explicitly focuses on what the strategy is, why it is important, how to use it, when and where to apply it, and how to evaluate it (Allen, 2003; Carrell et al., 1998; Grabe, 2009; Heeney, 2005; Shih, 1992; Yang, 2002, 2006; Zhang, 2007). Although research has given teachers direction regarding the approach to use when including strategy instruction in their classrooms, it has been left to teachers to develop the specific teaching tools. RC-MAPS represents one such instructional technique that provides teachers with an easily modified tool to assist in developing situation-based comprehension skills among L2 readers in academic environments.

It is important to note that RC-MAPS was developed through teacher observation of a gap in students’ reading comprehension. Currently, RC-MAPS has been implemented in only two academic institutions, and the evidence is anecdotal and based only on teacher and student observations and comments. Initial responses have, however, been positive. In the classes in which we have used RC-MAPS, we have noted that the quality of written responses to readings has increased for most students. The students that use the RC-MAPS with the Questioning Strategy rules tend to have task-specific and appropriate questions that integrate the text with their own knowledge, and they seem to have more confidence in their abilities to complete academic tasks based on readings. These preliminary observations demonstrate a need for further research on specific pedagogical tools that focus on teaching critical

questioning strategies in the EAP reading class. Finally, we recognize the need for empirical research on the proposed RC-MAPS technique, and we welcome input.

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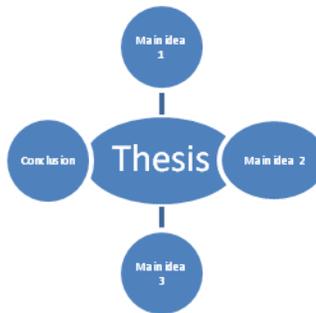
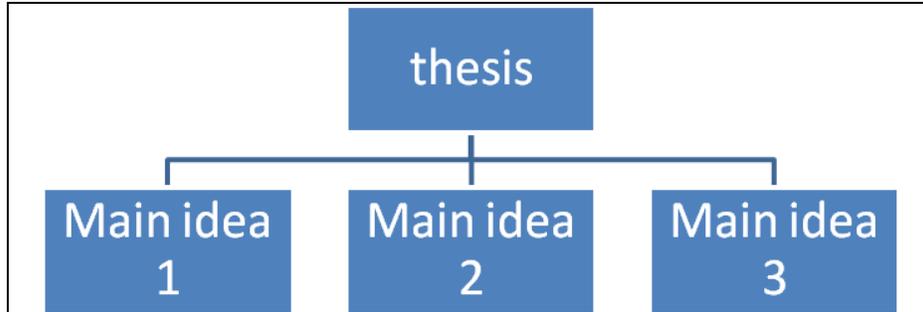
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**Appendix A: RC-MAPS: Text Based Comprehension Options**

**1. Mind Map Styles** [For description and classification texts as per Jiang & Grabe’s (2007) suggestions].



**2. Outline Style** [For narrative and time-line texts (as per Jiang & Grabe, 2007)].

- A. \_\_\_\_\_
  - i. \_\_\_\_\_
- B. \_\_\_\_\_
  - ii. \_\_\_\_\_
  - iii. \_\_\_\_\_

**3. Chart Style** [For cause-effect, problem-solution, description, classification, and for-against texts (as per Jiang & Grabe, 2007)].

Paragraph	Main idea	Support(s)
1	Homeopathy developed in 1700s – didn’t like current medical practices.	Based on 3 principles: law of similars, minimum dose, and single remedy.
2		
3		
4		
5		

## **Appendix B**

### **Homeopathy**

Homeopathy was developed in the 18<sup>th</sup> century by the German physician Samuel Hahnemann and is an approach to medicine because he was not happy with the most commonly used medical treatments of the time. His theory of medicine was based on three principles: the law of “similars”, the minimum dose, and the single remedy. The law of similars came as a result of observation; he noticed he developed symptoms of malaria after taking a strong dose of the malaria treatment quinine. This led him to believe that if a large amount causes symptoms in a healthy person, then smaller amounts could treat those same symptoms in an ill person.

Homeopathic medicine involves prescribing drugs that duplicate the symptoms of an illness. A homeopathic doctor will prescribe a drug made from plants, herbs, or other natural materials that would cause the same symptoms the patient is suffering in a healthy person. The classic recipe is one grain of the required herb mixed with 99 parts of milk sugar. The solution is diluted further by the homeopathic doctor with milk sugar until he reaches the 30<sup>th</sup> time.

Many scientists dispute the validity of homeopathic remedies, but clinical trials have provided some empirical evidence that homeopathic patients can show positive results. Practitioners and patients do not care about the physiological mechanisms behind this phenomenon, they simply care that it works for them.

Allopathic (conventional) medicine tends to attempt to create effects that are different from a disease or an illness, and many practitioners of allopathic medicine have rejected homeopathy as sham treatment. However, not all conventional treatments work, so many people accept homeopathy as a valid alternative.

Homeopathy is practiced worldwide and the number of homeopaths has increased in the US to approximately 3000 in the late 1990s from less than 200 in the 1970s. Homeopathy, like conventional medicine, has empirical support, anecdotal evidence, and can cure ailments; it is a valid course of treatment.

(Adapted from Frazier, L., & Leeming, S. (2007). *Lecture Ready 3: Strategies for Academic Listening, Note-Taking, and Discussion*. Oxford University Press: NY.)

**Appendix C: Situational RC-MAP Outline Style**

<b><u>Questions and Answers</u></b>	<b><u>Text Information</u></b>
	<p>I. _____</p> <p>A. _____</p> <p>B. _____</p> <p>    i. _____</p> <p>    ii. _____</p> <p>    iii. _____</p> <p>C. _____</p>

**Appendix D: Situational RC-MAP Chart Style**

<b>MAIN IDEAS</b>	<b>SUPPORT</b>	<b>QUESTIONS</b>
Homeopathy developed in 1700s – didn't like current medical practices.	Based on 3 principles: law of similars, minimum dose, and single remedy.	<i>1. Does one ingredient actually fight all symptoms – some diseases have many symptoms ie: common cold</i> <i>2. How has medicine has changed since the 1700s?</i>

**3. Write the answers to all of your questions from above.**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_

**Appendix E: Situational RC-MAP Mind Map Style**

