

## **No Memorization: Helping Students to Understand, Process, Analyze and Retain Information**

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### **Introduction**

**In this age of globalization, our students are exposed to a massive flow of information both inside and outside of the classroom. It is critically important that students be able to think independently in order to make informed judgments about this information.**

**To achieve this, we must create learning environments in our classrooms that encourage in student the skills that they need to be discerning consumers of information. We have an obligation to help students learn not to be just passive receivers of information, but rather intelligent thinkers and analyzers of information provided to them.**

**As Muslim educators, we must foster in our students thought and reflection and not mere rote memorization.**

### **Perspectives on memorization**

- Richards, J. T. Platt and H. K. Platt (1992) and Rowntree (1981) provide definitions of memorization that include the concepts of learning mechanically, repeating material many times over and giving little attention to understanding or meaning.
- Clearly, memorization does not foster understanding, analysis or retention of information. Educators have lamented the fact that often students were trained to be passive receptors of information instead of being taught to critically analyze information (Oliver & Utermohlen, 1995).
- The use of memorization as a teaching and learning strategy is commonplace not only throughout Saudi Arabia, but can be found in other Arab countries, in Asia and Africa as well (Al-Rashudi, 2002).
- While memorization it has its place in such areas as memorization of Quran, poems and songs, etc., it is not a particularly useful learning strategy when students are expected to understand, analyze and truly retain information in a meaningful way.

### **No memorization: Guiding principle**

- Caleb Gattegno proposed that the purpose of teaching is to serve the learning process and not to dominate it (Larsen-Freeman, 2000). This guiding principle affects the way the teacher approaches his or her work in the classroom. The teacher does not dominate the classroom in the traditional sense, i.e., by simply giving students information. Instead, the teacher uses teaching techniques and strategies that create real learning situations – those that leave students with the time and space for actual learning to take place. In these classrooms, there is less teacher talk and more student talk (Gattegno, 1976; Stevick, 1976).

<b>Critical Thinking, Silent Way, Cooperative Learning: Alternative strategies</b>	
<b>Principles</b>	<b>Strategies</b>
<p><u>Critical thinking</u></p> <ul style="list-style-type: none"> <li>• At the university level, teachers need to incorporate critical thinking into their lessons and change their teaching methods so that they do not depend solely on the lecture as the method of instruction (Luckey in Fasko, 2003).</li> <li>• While there are differences in strategies, those in the critical thinking movement overall have the ultimate goal of producing autonomous thinkers (McPeck, 1990)</li> <li>• Classes should be redesigned to reflect an emphasis on independent thought (McPeck, 1990).</li> <li>• Critical thinking should be taught across the disciplines and not taught as isolated skills (McPeck, 1990).</li> <li>• There is basic agreement that the traditional way of covering material with unchallenging questions needs to be replaced with questions that stimulate student interest and reflection (Shermiss, 1999).</li> </ul> <p><u>Silent Way</u></p> <ul style="list-style-type: none"> <li>• Teachers should accept students as independent learners and use their abilities to work with them (Gattegno, 1976).</li> <li>• Students should be given opportunities to use what they have learned in an autonomous way; to take new information, understand and integrate it and use it in their own way (Gattegno, 1976).</li> </ul>	<p><u>Critical thinking</u></p> <ul style="list-style-type: none"> <li>• Conference style learning is one strategy that is an alternative to lecturing. The teacher does not give a lecture, instead he or she acts as a facilitator.</li> <li>• In conference style learning, students are required to read all assigned readings before attending class. Assigned readings are easily understood by students, but challenging as well. During the class, students ask questions of each other, answer questions and engage in discussions on topic.</li> <li>• The teacher helps guide discussion by encouraging students to build on each other's ideas and by asking questions that will lead to important information rising to the surface (Underwood &amp; Wald, 1995).</li> <li>• Use of open-ended questions, which do not have a specific correct answer but rather allow students to think and discern their own answers. Also, creating ambiguity in the classroom gives rise to students thinking through problems. This also allows students to be creative and be less fearful of giving the "wrong" answer (Potts, 1994; Strohm &amp; Baukus, 1995).</li> <li>• Helping students to classify and categorize information, and to find analogies and other relationships, promotes critical thinking and retrieval of new information (Carr, 1990).</li> </ul> <p><u>Silent Way</u></p> <ul style="list-style-type: none"> <li>• Encourage students to discover, create, problem-solve and peer-correct</li> <li>• Students work in pairs or groups in a planned manner or spontaneously help each other. This encourages student independence and develops in students the ability to use what they have learned in different ways.</li> </ul>

<ul style="list-style-type: none"> <li>• It is believed that students learn best with less dependence on the teacher and more dependence on each other and on themselves.</li> <li>• Silence on the part of the teacher is a powerful tool when used appropriately.</li> </ul> <p><u>Cooperative Learning</u></p> <ul style="list-style-type: none"> <li>• Teaching that takes place in traditional classrooms do not provide optimal learning situations for students. Learning can be enhanced when students are encouraged to work together and to help each other (Slavin, 1983).</li> <li>• Students do best and are more apt to think and reflect when they are learning in groups. It is believed that in structured group learning situations, learning is active rather than passive (Cooper, 1995).</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage students to work together to help each other solve problems and challenges that arise in class.</li> <li>• Silence is used to provide the student with time for reflection, comprehension and analysis of information. It also helps the teacher to be mindful of not dominating the classroom discussions and activities.</li> </ul> <p><u>Cooperative Learning</u></p> <ul style="list-style-type: none"> <li>• Cooperative learning is based entirely on the concept of students working in groups. Group learning takes place on many levels.</li> <li>• Cooperation can refer to cooperative behavior, e.g., working in pairs or groups.</li> <li>• In cooperative incentive structure, pairs or groups are rewarded based on group performance; in cooperative task structure, pairs or groups must work together and may or may not be rewarded (Slavin, 1983).</li> </ul>
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**Study Participants: King Saud University Students**

- Study participants are third year students at King Saud University’s Women’s Campus and are enrolled in the English Language and Literature program in the Techniques in Language Teaching class. The teaching strategies implemented during the semester were based on strategies discussed. Eighty-eight students filled out a questionnaire at the end of the semester with questions related to the class activities and their experiences. The focus was on their perceptions of whether the strategies prompted them to memorize, process, analyze, understand or retain material. The study is ongoing and these are preliminary findings.

**Summary of student perspectives**

- Student questionnaires showed that a majority of students reported that they had thought about the difference between memorization and retention before attending the class. Responses also reflected some change in attitudes from the beginning of the course to the end of the course regarding their desire to memorize information; nearly 20% of students indicated less of a desire to memorize. In addition, 10% of students changed their opinion in favor of wanting to understand and retain information. There was also a 13% shift in favor of wanting to process and analyze information.
- Less than a quarter of students responded that they were often or always encouraged to memorize in class.
- As far as asking questions was concerned, a majority of students indicated that they asked questions in class. While a larger percentage of students indicated that they answered

questions than asked, the responses showed that a large percentage of students perceived themselves as participating in class.

- Questions asked by both teacher and students seemed to help the students, as did use of their own words to explain information and reading assigned material before coming to class.
- Working in groups was also perceived as helping students and nearly two thirds of students reported that silence helped to some degree.
- Generally speaking, student responses seem to reflect that the strategies used helped them to some degree to process, analyze, understand and retain material. Students also seemed to perceive it as more desirable to process, analyze, understand and retain material.

### **Final Comments**

**As we as Muslims move forward in this century, it is critical that we give the future generation tools needed to properly assess information presented to them. We should encourage them to be discerning consumers of information and not simple receptacles.**

**Fellow educators are encouraged to use some of the strategies outlined in this paper in their classes. The issue of memorization has been a great stumbling block to thinking and reflection in the classroom. It is hoped that strategies discussed in this paper will be replicated by others and will contribute to efforts to help students overcome this habit.**

**Note: Additional contact information for Dr. Vassall-Fall  
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