Overview

Video-based Supplemental Instruction (VSI) is a highly structured approach to learning that helps students master course content as they develop and refine critical thinking skills. In VSI, professors of core curriculum courses record their lectures on video and students are enrolled in a video section of the college course. In this video section, trained facilitators use the recorded lectures as a tool and guide students through the learning cycle. The lectures are stopped at key places for clarification, practice, and discussion.

In VSI courses, the professor prepares the exams and oversees the grading while the facilitator oversees the learning. Staff from the VSI Program mentor the facilitator so that essential reading, learning, and study skills are modeled, practiced, and acquired by the students. Facilitators become skilled in asking questions of students so that the students develop verbal and written reasoning skills through explaining their answers to others.

UMKC Campus VSI Program

College students enroll in a VSI section of the course instead of attending the live-lecture class. They meet 5-10 hours per week, which provides additional time to process course content. For this investment of time, they earn credit for the academic subject - General Chemistry, Western Civilization, Calculus I, College Algebra, or Intermediate College Algebra. VSI has been offered on campus since 1992.

UMKC High School Dual-Enrollment VSI Program

High school students enroll in a VSI course to earn college credit and at the same time receive high school credit. College courses - General Chemistry, Western Civilization, Calculus I, College Algebra, or Intro to Physics, are usually completed in a school year instead of a semester. High school teachers facilitate these courses even if they do not meet dual-credit college certification requirements. This occurs because course lectures, materials, and assessments are delivered to the students by a college professor. Teachers help facilitate the learning and administer exams. Since 1993, UMKC has supported Missouri rural high schools through VSI. There are currently 28 participating schools.

Key Elements of VSI

*Time to think* is a critical element that is present in the VSI classroom. This powerful dynamic occurs when the facilitator or students stop the lecture. During this time, students assimilate, analyze, and synthesize information. Exchange of ideas with fellow students and the facilitator creates a synergy of ideas that the student could not create individually.

*Time to interact* is a critical element applied to mastering of content since students are expected to take notes and discuss this material as well.

*Time to review* is an element applied to homework mastery and test preparation especially in math and chemistry. This management of learning and study time helps students tackle and understand difficult material.
A Different Approach

The implementation steps that prove effective in VSI:

1. **Preview** both the vocabulary which will be used in the lecture and the main topics to be covered in the lecture. ("Tell them what you are going to tell them.")
2. **Process** the lecture. In doing so, stop when necessary to permit students to clarify something the professor has said or simply to assure that the students are tracking the progress of the presentation. ("Tell them.")
3. **Review** the lecture, using any of a variety of well known techniques. ("Tell them what you told them.")
4. **Polish** up on all materials before examations by reviewing and practicing for an examinations. ("Tell them to remember what they were told.")

The difference between this approach and those traditionally used in postsecondary education lay in the centrality of students to the process as opposed to the centrality of the material to be learned:

- Students conduct the preview;
- Students determine the pace of the lecture;
- Students assure their own mastery as the lecture progresses;
- Students select the key points for immediate review;
- Students identify misconceptions and modify and adapt their conceptions to achieve, eventually, more complete understanding.

In essence, students take responsibility for their own learning. The role of the facilitator is to drag his or her feet, assuring that students understand the material while firmly resisting the pressure from students to give them answers, thus hurrying the process. In the final analysis, facilitators become experts in finessing answers from their groups.

Data represents students enrolled in History 201 at UMKC from fall semester 1997 to fall semester 2005.

**Grade Comparisons**

<table>
<thead>
<tr>
<th></th>
<th>Non-VSI</th>
<th>Campus VSI</th>
<th>HS VSI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Grade</td>
<td>2.30</td>
<td>2.27</td>
<td>3.01</td>
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</table>

**Standardized Test Comparisons**

<table>
<thead>
<tr>
<th>Demographic Group</th>
<th>Non-VSI</th>
<th>Campus VSI</th>
<th>HS VSI</th>
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</thead>
<tbody>
<tr>
<td>White/Non-Hispanic</td>
<td>23.8</td>
<td>18.0</td>
<td>23.2</td>
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<tr>
<td>Black/Non-Hispanic</td>
<td>62.2</td>
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<tr>
<td>Hispanic</td>
<td>42.2</td>
<td>42.2</td>
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<tr>
<td>Asian or Pacific Island</td>
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<tr>
<td>Other</td>
<td>4.2</td>
<td>4.2</td>
<td>4.2</td>
</tr>
</tbody>
</table>

**Demographic Comparisons**

Data represents students enrolled in History 201 at UMKC from fall semester 1997 to fall semester 2005.

Number of Students: Non-VSI: 1,955 Campus VSI: 323 HS VSI: 799

Note:
Grades based on 4-point scale from 0 to 4.
Standardized Test is the ACT test based on a scale from 0 to 36.