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## EXPERIENTIAL LEARNING FOR INTERIOR DESIGN STUDENTS: USING CADD, LOTUS 1-2-3, AND WORDPERFECT

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### ABSTRACT

This paper discusses a computer-assisted approach to help students develop business skills needed in the interior design profession. The experiential learning project was designed with three components to hone students' skills in computer-aided design and drafting (CADD), spreadsheets, (Lotus 1-2-3), and word-processing (WordPerfect). The project has potential for use in business classes which develop the students' entrepreneurial, merchandising, or small business management skills as well as within the design field.

### INTRODUCTION

Students in interior design develop their artistic skills throughout their scholastic program based on a master-apprenticeship pedagogical technique. Students also need to develop the analytical and business management skills for successful, profitable operation of a business. One of the characteristics of contemporary design education distinguishing it from that of the past stems from the belief of Gropius that students thoroughly understand What they discover for themselves (Bowser, 1983). To aid the student in the discovery process, use of computer-aided learning experiences for both the artistic and business functions is becoming essential to prepare students for the interior design profession (McLain-Kark & Rawls, 1988). Use of computer-aided experiential exercises can act as a realistic stimulus for learning and also as a laboratory for the application of procedures taught elsewhere (Schroeder & Gentry, 1987).

The computer—aided experiential exercises were developed for 45 undergraduate students in the Professional Practices for Interior Design Class. The project was based on a survey, which assessed computer skills of students in the class. Student experience ranged from no experience (16Z) to a limited number of students who had one CADD workshop and used word-processing for class papers.

### THE IBEAM PROJECT

The Integration of Business, Experiential, Artistic, and Management skills (IBEAM) computer project consists of three components. The IBEAM project incorporates WordPerfect, Lotus 1-2-3, and CADD systems software to develop student analytical and artistic design capabilities. For the first component the students used AutoCAD software on personal computers. A problem in the development of the project was the labor-intensive aspects of teaching CADD to students.

To address the problem, six of the most computer-proficient students were selected for advanced CADD training by the class instructors. These student leaders were then each responsible for teaching five to eight of their fellow students in a team-oriented approach. The CADD component required the development of two alternative floor plans for furniture arrangement in the same commercial space (office and conference room),

The second component utilized a Lotus 1-2-3 spreadsheet based on classification merchandising and sales analysis. The template used classifications such as carpet, window treatments, wallcoverings, upholstery fabric, and furniture. Students were required to enter sales by classification by cost and retail for a selected month on the templates. Students were then asked to analyze sales, profitability margins, and probable reasons for poor performance of a classification.

WordPerfect software was the basis for the third project component which required modification of a standardized contract. After entering a standardized contract document, students were asked to "cut and paste" the document for a specific client to reflect the application of learning about legal requirements gained in prior class sessions.

### CONCLUSIONS

The IBEAM computer project stimulated student interaction and team effort as well as developing analytical skills. The experiential learning setting helped students enjoy the learning process and allowed students the freedom to explore additional learning experiences as they gained proficiency on the computer.

### REFERENCES

- Bowser, W. (1983). Reforming design education. Journal of Architectural Education, 37 (2), 123-132.
- McLain-Kark, J., & Rawls, S. (1988). CAD education in interior design: Computers and the creative process. Journal of Interior Design Education and Research, 14(2), 23-26.
- Schroeder, D. L., & Gentry, J. W. (1987). Teaching MRP experientially through use of Lotus 1-2-3. Proceedings of the 14th Annual Convention of the Association for Business and Experiential Learning 14, 179-182.