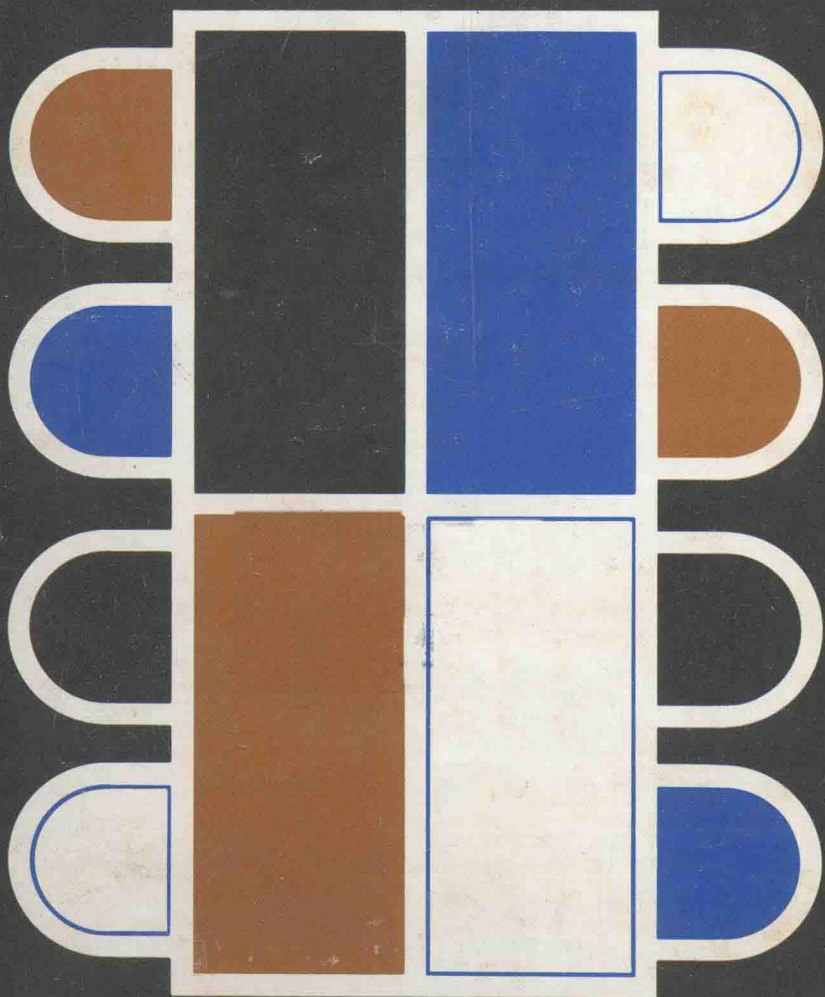


THE DESIGN OF THE INDUSTRIAL CLASSROOM



KENNISTON W. LORD, JR.

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The New Division

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AUTHOR'S PREFACE

A number of years ago, announcer Dennis James, when advertising a certain brand of cigarettes, used to say, "We're tobacco men, not medicine men." That's somewhat how I feel as this work is undertaken, for I am an industrial educator, not a construction expert.

Faced for years with the necessity of using substandard or less-than-desirable facilities in order to weave my "educational magic," I have often wondered what it would be like to have a facility designed to accommodate the students, rather than have the students and instructor adjust to the physical facility, where all of the difficulties I have experienced at the hands of those who view a classroom as merely another room or converted office space could be overcome. Unlimited funds were never the issue—nearly anything can be designed and constructed to specification given adequate funds. However, over the years it has seemed that a good portion of the funds designated for such facilities has been poorly spent when construction and business people have designed and built adult educational facilities without consulting with an experienced industrial educator.

Few of us are given the opportunity to “do it right” (or to do it in a manner we think is “right”) and most of us will never have that opportunity. However, as an industrial educator I’ve learned a lot about classrooms, their design (or lack of it), and their use and it seems that the ability to “do it right” comes from first knowing “*what to do.*”

Industrial-training directors, have, for years, been faced with the need to obtain and utilize training facilities. More often than not, in-house courses are held in an “available” conference room or in an unoccupied portion of a facility; thus little has been done in the way of obtaining “proper” facilities for the best possible education of the students.

Occasionally, when training directors have had the opportunity to have facilities prepared for their use, they have been faced with the question, “How do we go about it?” It is to this purpose that this manual has been designed.

When the opportunity arises to construct a new classroom or to modify a facility, too often the decisions are left to company planning people or construction engineers who are unfamiliar with the special needs of an adult-education activity. What results is a training facility that is prepared as if it were an office facility without desks. Inadequate lighting, airflow, furniture, projection facilities, and seating structure are usually the gross result, but the net result is that the educational process is impeded and training takes longer to accomplish. How is that possible? Because the frustration of trying to learn in an inadequate facility often negates the learning process, requiring more expensive “on-the-job, seat-of-the-pants” learning.

So we, who are industrial educators and not construction people, have compiled this set of guidelines for what we consider to be the “right” way to create a classroom. These guidelines are not necessarily the ideal; they are designed as *minimum* specifications.

Throughout this book, the initial assumption is that the reader will have an opportunity to "start from scratch," designing, planning, and constructing the classroom from the beginning. However, it is recognized that such an opportunity is *not* universally available. In reality, a training director is usually given a facility and told to "make do." For that reason, special attention has been given wherever possible to the conversion of existing facilities.

At best, these guidelines will help you to plan the optimum facility. At least, they will help you to avoid the pitfalls and difficulties we've encountered in our 20-plus years of involvement with the adult educational process.

*No. Chelmsford, Mass.
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Kenniston W. Lord, Jr., CDP
President, The New Division

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and to Coleman Finkel, President of the National Conference Center, for his very thorough review and his contributions to the text prior to publication.

My thanks go to them all.

EDITOR'S PREFACE

I've been in and out of classrooms for more years than I care to admit. I've been literally hurt to tears by the small and large things that have happened to sidetrack the learning process.

For instance, I've seen a competent instructor so distracted by a blown fuse in a coffee pot that he really could no longer get his point across. I've watched as a technician stumbled through a presentation that went from acceptable to unbearable because above his head was a clock that clicked off the minutes and made every student painfully aware of how long the lecture was taking. I've seen students give up in the classroom because there was so much outside noise that most of the instructor's words were unintelligible.

All of the above examples have one thing in common. They did not happen because someone didn't want the learning process to take place or because top management would not provide facilities that fostered learning. These things happened because the person or persons who designed the class-

room didn't really know (1) that any learning disability would result from doing it the way it was done—in other words, genuine ignorance of the learning impact—or (2) that the cost of doing it that way resulted in expenditures or lost revenue which builders don't customarily measure.

This book was written because Ken and I believe that the classroom is an extension of the instructor. In some ways it is written in an understated pedagogical sense, such as concerning noise in the classroom. But the book has one consistent concern—student learning.

You will note that we have avoided using brand names, except in cases where we feel an *exceptional* device or facility is being used. It has been our experience that the quality of specific brands can be transitory in nature. All references, with the exception of specialized devices, are therefore made to specification rather than to brand name.

Robert B. Ware, CDP

REVIEWER'S FOREWORD

The meeting room is critical to the successful meeting. For more than two years, we at the National Conference Center have conducted research among 500 executives who are responsible for the planning of every type of meeting. The research was directed to the smaller group meeting (fewer than 30 people) which is held for at least one day. Among other things, we wanted to learn the average number of hours spent in each of 11 different activities that occur in the smaller meeting throughout the day. Further, we asked these executives to give us a percentage figure for each activity, relative to the importance of that activity to the achievement of their meeting goals. Not surprisingly, the most significant activity occurred in the main meeting room. The percentage of importance attached to it consistently ranged from 60 to 70 percent. While all meeting activities must be considered in terms of their contribution to learning activities—such as meals, breaks, and socializing—it is essential that primary attention be given to the activity in the principal meeting room.

There are four key elements to a successful meeting:

1. The program's subjects and design.
2. The speakers.
3. Administration details.
4. The meeting environment.

The meeting environment or the room in which the principal discussion or instruction occurs should be of particular importance; however, it is this element which receives the least amount of attention.

Organizations will *never* obtain maximum productivity, learning, and results from a meeting unless more concentrated attention is given to the design of meeting rooms, whether they are in office buildings or plants. The following two extremes are unsatisfactory: (1) a room set aside wherever space is available or (2) a room overdesigned by an interior designer who is more concerned with the aesthetic qualities of a room than with the function it will perform.

A critical factor which meeting organizers must deal with when designing a meeting room is the "environmental psychology." This discipline takes into consideration the impact of every element in the meeting-room environment on the attendees' attitudes and actions. This impact, though powerful, is often subconscious.

A more thorough and probing look into the total design of every element of a meeting room will help to answer such serious and often overlooked questions as the following:

- How can the concentration levels of meeting attendees be increased?
- What can be done to eliminate distractive factors which interrupt and interfere with the learning process?

- How can greater interaction between the individuals attending a meeting be achieved?
- What can be done to help the communicators—the speakers, instructors, chairpeople, and discussion leaders—to communicate information and to lead discussions with the greatest effectiveness?
- What can be done to reduce the fatigue of the meeting attendees, thereby minimizing drowsiness and tiring conditions?
- What can be done in the meeting room to provide each person attending a meeting with a feeling of brightness, cheerfulness, and alertness?

Every one of these questions can be answered constructively and helped immeasurably by taking a thorough look at your meeting rooms. Conversely, a maximum return on your investment in meetings cannot be obtained without more concern for meeting-room design.

There is no need to compromise—it is not necessary to merely accept “space.” We must look beyond the aesthetic qualities of a meeting room, for it is frequently antithetical to conducting a good meeting. Detailed design considerations are important, and few people take a critical look in this direction. Fancy hotel rooms will not do; the sterile setting of the typical college classroom is also inadequate; old mansions, which use salons, libraries, and living rooms as meeting places, provide no originality and are unacceptable.

We at the National Conference Center have found that there are eight environments which must be considered to achieve total meeting effectiveness:

- The meeting room where the principal meeting or instruction is to be held.
- The meeting room where project groups or discussion groups will function.

- The "home" environment where the meeting attendees sleep and relax, generally a hotel room.
- The indoor/outdoor areas for relaxation, group sports, and games.
- The facility where socializing will take place.
- The place where the attendees will obtain their meals.
- The environment for the attendees' breaks.
- The building's environment and exterior setting.

However, the meeting room is the principal springboard from which learning flows and stimulation occurs.

Therefore, it is of paramount importance that everyone concerned with reducing waste and improving the return on the tremendous amount of money invested in meetings carefully read the excellent ideas and suggestions contained in this book. It is a subject which sorely needs original and intelligent thinking.

Coleman Finkel
President, The National Conference Center
East Windsor, New Jersey

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THE PHYSICAL CLASSROOM

No matter what else may be available to the educational process, the physical facility is of paramount importance. Educational traditionalists say that the facility is not very important—that the course could be held out of doors, under a tree, and the learning process would still take place. This is true, but the question is “How *much* learning?”

The best instructor in the world would have a difficult time maintaining interest and stimulating learning in an environment which was not conducive to learning. Attention spans would be short, distractions would occur, and inconveniences would be in evidence if the facility did not lend itself to the educational process.

There is a right way and a “less-than-right” way to design an educational facility. In our experience, educational facilities are not so much poorly designed as they are inadequate or underdesigned—that is, things are done that way because no one considered them, rather than because the designers “guessed” incorrectly.