

## The Ecology of Learning

It is an axiom of biology that plants and animals will not flourish apart from an ecosystem that supports the particular needs they have to survive and thrive. In some ecosystems, certain plants or animals will encounter things that either inhibit their life or nourish it. Joseph Sittler once wrote a book called *The Ecology of Faith*, articulating the matrices that maintain or thwart Christian commitment. If we are serious about the concept of incarnation, then we need to consider the physical context of the rooms in which teachers teach and students learn, as a means to discover the ways in which education may be embodied in a setting-in-life—our educational eco-system! This reflection considers the physical ecology of the classrooms in which teaching and learning take place as an important factor in the educational process.

There is a tendency for us teachers to be blind to the surroundings in which we teach, in part because we are focusing on the subject matter and the students. But we would be greatly remiss if we did not pay attention to the physical environment in our desire to be effective teachers. We can be severely limited in what we do by poor or inappropriate furniture, drab floors and walls, loud fans, and a singular lack of imagination in regard to décor. At the same time, the learning can be remarkably facilitated by a variety of room sizes and set-ups, comfortable furniture, attractive walls and floors, natural or soft lighting, and interesting and beautiful decorations on the walls.

“The medium is the message,” said Marshall McLuhan. “And,” he added, “the medium is the message.” The physical medium of learning gives a message, and it also has an impact. The medium in which we study will have an affect on all that we do, making some things possible and making other things very difficult. You can learn something about the commitment to education on the part of an institution when you look at its classrooms. And you can also learn a lot about what kind of learning the institution expects to happen. If the classrooms are set up in lecture style with a podium in front and note-taking desks lined up in neat rows, you pretty well know what will happen there. If the rooms are set up with long tables and outlets for personal computers, you know what students will be expected to bring to class. If the classrooms are small with chairs around one large table, this setup will involve interaction. Students themselves will know the mode of learning in the course from the very first moment they walk into the classroom on the very first day—and *they will probably act accordingly*. Classroom setups are like literary genre. They set up expectations. When students see what is expected of them, they respond with the expected behavior. The medium is, indeed, the message.

Sometime before each semester, our LSTC registrar Pat Bartley sends out a form inviting requests for room assignments. The moment I know how many students will be in a particular class, I walk around the seminary to see what classrooms will work best for that class. The size of the classroom in relation to the size of the class is crucial. So the first thing I look for is a classroom with about the same number of chairs or desks as there are students. Every year I have in mind this strange image of going past a classroom one day at Carthage College. There was the instructor standing at a lectern reading his notes to the class. There were about fifty chair-desks lined up in rows in lecture style. But there were only three students! And they were scattered throughout the room! It looked farcical, lecturing to a “crowd” of three, each one at least ten or twenty feet from the instructor and from each other. So I determined not ever to let that happen. The class should look full but not crowded. Besides, any performer knows that members of an audience need to sit together. In this way, there can be a group reaction to what happens as well as individual reactions. After all, learning is a communal as well as an individual endeavor.

Sitting alone in class is like sitting in the corner of a church. Students should be next to each other—and in talking distance.

This is not always easy, especially if the class is about thirty to forty students, and the only available classroom for this number has fifty to sixty desks. So, I go to the classroom a half hour before each class and either stack or push to the side all chairs except a few more than the number in the class. Then I arrange the chairs in semicircles. This way the class sits together as a group. Also, the front row will not be vacant, as if proximity to the teacher is toxic!

In a typical lecture-style classroom, the message to the students is this: “you will face and relate only to the teacher, and you are expected to listen and to take notes and perhaps to ask questions of the teacher; but do not expect to talk much with other students.” This system was set up either for children to be quiet and not talk with other students, or it was set up for professors who were formidable lecturers. So I need to compensate for that with semi-circles. If it is a large class of thirty to forty, I put the desks in three rows of large semi-circles with space in front. That way there will be space in front of the teacher’s desk for me to move around and interact with students in different parts of the room. No student will ever be too far away from me. And even in a large group, the students will be somewhat turned (in the semicircle) toward each other—for possible large group discussion that would include interactions between students. And, if the desk-chairs are easily moved, I will have the students move their chairs, turn to each other (often in pairs or groups of three or four), and do some exercise together—then turn back toward the center for plenary discussion. This arrangement provides the greatest flexibility for learning opportunities. If you treat the class period as a workshop, you will want to vary activities and therefore also room arrangements.

When the class size is five to eighteen, I am looking for a room with tables that can be placed in a circle. I always prefer tables. They give the message that we mean business, that students will need to sit up to the table together and participate. Tables also offer space for people to lay out their texts and to take notes. The problem with a square or a rectangular setup of tables is that students cannot see those who are lined up alongside them. In a round set-up, everyone can see everyone else, and there is mutual accountability to each other. Usually the tables can be placed in a hexagon or octagon shape. Again, the number of chairs and places at the table should approximate the number of students in the class. Again, I will go to the room well before the class and arrange the room accordingly—taking down or adding tables, moving chairs, and getting the best setup for light and sound. Again, this offers great flexibility for us to work as a whole group, in pairs, and in small groups. There is no “head” to the circle (as there can be with a square or rectangle), so I can choose to sit near a chalkboard. If I want to de-center the learning process, I will sit at different places each week.

Hence, I will vary the setup according to the size and nature of the class and the pedagogy I wish to exercise. In a Greek class, I discovered I could place individual rectangular tables at angles in the room (fan-shaped in configuration so that no students sit with their back to me), and four students sit around each table and across from each other in order to translate and do exercises together. I now use this practice for large classes of twenty to thirty students. For twenty eight students, seven tables are set up separately with four chairs to a table. When students arrive, I give them an exercise to do in groups of four on the assignment they have prepared for class. Often I will ask them to move around (play musical chairs) and find other students to interact with—so they learn from each other and interact with students they do not yet know. In the same course, I will set up the tables and chairs one week as lecture (one small u-

shape with tables inside a large u-shape with tables) and another week as work stations—depending what we are doing for that week.

Another class I teach, “Scripture by Heart,” requires discussion among the students and also opportunities for the students to “perform” scripture passages to each other by memory. I can accommodate no more than twelve students in this class. In this class, I have often reserved two rooms, one for discussion and one for performance. The last time I taught that class, no lounge was available for performances. So, I got a nice carpeted classroom about twice the size of the class. At one end, I set up tables in a circle for discussion. At the other end, I set up one semicircle of chairs for performing and listening. At midterm and finals, the class gives a performance for the whole seminary community, and I set up the large seminary lounge for these formal performances. Here I make sure we set up fewer chairs than the number of people we expect to attend. Then as people come, they fill up the chairs and we need to put out more chairs! Psychologically, this helps the audience as well as the performers see that a lot of people have come, and the room is full!

What is the point of all this? The questions are: What are you teaching? How do you want to teach it? How do you want students to learn? What different things do you want to happen? How can the room size, the room set up, and the flexibility of the room facilitate or hinder this from happening? Even if a school has diverse room sizes and ready-made set-ups, it is unlikely that that they will exactly meet your needs for any given class. So, you will always need to customize the room yourself or improvise with what you have. This means planning ahead. It can also mean changing rooms or adding a room to work with—even in the middle of the semester. Every class is different, and you may not know its possibilities until you have been with the group for a while. Besides, a change of scenery in the middle of a three-hour class or in the middle of a semester can sometimes rejuvenate a group. I managed to secure the faculty lounge one year for secondary classroom use. Sometimes students want to go outside, although I usually find that venue distracting and unproductive (depending what we are doing). Look around your school. You may find some gems just waiting for a class to blossom.

All of this may seem like overkill to you. It involves a lot of planning and effort. But it makes a difference. And students are often blissfully unaware of how much effort goes into this. After I have spent ten minutes setting up the room, a few students will come late and just pull chairs out of the stack on the side and sit in precisely the area I was trying to avoid. I have a fantasy designed to make students aware of the problem. Here it is: I want students to arrive the first day to an absolutely empty classroom. Their expectations would be thrown, and they would have to think about it. Then together we could decide what we wanted to happen in the class and what setup we would need for that to take place.

Other conditions in a room are crucial also. At the seminary, we have the most inefficient heating system in the civilized world—forced air that comes through small slits in the ceiling tiles and the presence of vents with fans immediately behind the vents—virtually in the room! That means there is a loud fan going constantly. Everyone has to speak so that people can hear from the other side of the room. Most people do not realize the impact of such background noise. It just seems like background noise we have to live with. One day, for some inexplicable reason, the fan in one of my classrooms just stopped. It was amazing. We suddenly realized that we were speaking in loud, strained tones. We lowered our voices and began to speak with each other in ways that were more intimate and personal, instead of trying to relate to each other over top of some noise! What a difference! We were just talking to each other!

What about lighting? Sometimes there is natural lighting from outside. At other times, inside lighting is needed, usually fluorescent. The main problem comes when a light burns out. When a portion of the room is in the dark, it affects the whole group dynamics. Worse yet is when a fluorescent light flickers. It drives me nuts. I start twitching and blinking like the French Police Chief in the Pink Panther movies when Inspector Clouseau is getting to him. Sometimes, one of the lights goes out for a while and then, just when I am making some important point, comes back on. It is good for humor, but it does not solve the problem. We have a great maintenance department, and if you report it they will come while the class is still on or during the next break. But the problem is that if I do not report it during the class, then I forget—until the next week when I confront the same problem again and vow again that I will have it replaced! There is no need for these distractions and diminishments of classroom atmosphere.

Finally, what about decor? There must not be a single interior decorator in the world whose specialty is classroom décor. In the first place, colleges and universities generally look so institutionalized, as if art and décor had been reduced to the lowest common denominator. How can a university, which is supposed to be a think tank, exercise such a lack of imagination! Whoever designs these rooms must think of décor like elevator music. Maybe the worst examples are the portraits of past presidents or donors of the institution. Classroom décor reminds me of an essay H. L. Mencken wrote while taking a train ride across western Pennsylvania (where I grew up!). He determined that the only way to account for the row after row of drab, clapboard houses that lined the railway tracks was to hypothesize a “libido of the ugly.”

First of all, classrooms and hallways need not look so “institutional” with gray cinder block walls in the hallway and plain plasterboard painted white—every wall in every room the same color. Churches are like this too. But they do not have to be. I know a church group that broke off from a large Lutheran congregation in Rocky Mount, North Carolina, to form their own small congregation. They tried something different. They were a close knit group, like a family. One of the members had a dream one night that the church they were to build would look like a large home. He shared the dream, and they did it! They built it like a home and asked a few members to decorate the kitchen like it was their kitchen at home and another few to decorate the nursery like at home and others to do the lounge like a living room. It is amazing going into it. You feel very much at home—plants, curtains, knick-knacks, vases, art, family portraits, and so on. Why not try making some classrooms look like dens or studies—with book cases and home lighting and some photographs on display and a desk that looks like a home desk and so on.

And what about wall decorations? The art in most classrooms is pitiful, even worse than we find in churches. It is either a hodgepodge of things lying around that were put up by someone obligated to put *something* up. Or it was purchased from the same people who provide art for motel rooms or doctor offices. Usually it is displayed in cheap frames. Sometimes, tattered maps of the Holy Land or Reformation Europe are pulled down from a recess in the wall. Why not at least get reproductions of some really good art in some classy frames? Why not feature art exhibits? Why not get art from different parts of the world and do a different theme for each room? How about window art, like stained glass? Or sculpture? How about a photographic display that tells the history of the school or the town in which the college is located? Something interesting and attractive—and educational! I always wanted art or photography that served the disciplines taught in that room. For example, in my field of New Testament, what about a display of images of Jesus from around the world? Or aerial photos of

the land of Israel? Or what about hanging framed photographs of outstanding scholars in the field? If photographs of scholars were set up so that they could be changed, then I could point out the images of the authors we are studying during that semester. Whatever—just so we have some imagination and some class in the classroom!

I have a kindred spirit about these matters at a partner seminary here in Hyde Park, Chicago. Lib Caldwell teaches Christian Education at the Presbyterian McCormick Theological Seminary, which shares classroom space in our buildings. Lib is extremely knowledgeable about education and about teaching the faith. She also has a special appreciation for the ecology of the classroom. I have never sat in on one of her classes, but I know what it looks like. And it is fascinating. Between classes, I often pass by her classroom when she has arrived well ahead of time to prepare for a class. Invariably, I am drawn to stop in and see what she is doing. Her classrooms are carefully set up for group interaction. She will also have one or more tables spread with colorful cloth. There may be lit candles or a fresh flower arrangement. Books may be on display. Resting on the chalk tray or hanging up may be artwork relevant to the subject matter for the day. Food may be present. Every student who enters this space knows that it has been carefully prepared to provide a meaningful and aesthetically-pleasing educational experience. Not only that, they leave seminary with a model for how to do it in their parish ministries.

We began with a concept of the “ecology of learning” as the physical surroundings that either foster or thwart the educational process. Awareness of the full context of education is an important element in pedagogy. It becomes clear that no single physical context will work for all educational events. There is need for flexibility and experimentation. Of course, there is no guarantee that these efforts will have a significant impact. On the other hand, they may lead to unforgettable learning experiences. What will probably not work is paying no attention at all. We neglect the ecology of learning at the risk of the loss of learning. Theology and interpretation are unavoidably contextual. So is education. One way or another, for good or for ill, the context *is* there. So why not attend to these otherwise mundane matters with imagination and a sense of adventure?