Learning Environment: Creating and Implementing a Safe, Supportive Learning Environment

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In creating a learning environment, it is necessary to look at all factors that impact the development of students. The physical, intellectual, and emotional aspects of the environment must be considered. The physical characteristics of the room impact those who work within. Some of the characteristics are set and must be incorporated into the educator’s plans. Other characteristics (such as furniture arrangement, displays, and accessories) can be changed and are at the discretion of the educator. The intellectual environment of the classroom includes the standards, expectations, objectives, learning strategies, and assessment that are expressed directly through the written curriculum and covertly through the hidden curriculum. Individual differences among students and teachers need to be recognized and addressed, including learning styles, abilities, interests, and patterns of intelligences (Gardner, 1999). The emotional environment of the classroom is comprised of feelings of safety, support, and respect. Management, discipline, and motivation are important aspects of the emotional environment. The cultural impact is also important to recognize. This includes diversity in social class, race, ethnicity, and gender (Woolfolk, 1998).

Introduction

Standard Seven of the National Standards for Teachers of Family and Consumer Sciences indicates that a beginning family and consumer sciences teacher should be able to demonstrate the ability to “create and implement a safe, supportive learning environment that shows sensitivity to diverse needs, values, and characteristics of students, families, and communities” (NATEFACS, 2004). In creating a learning environment, it is necessary to look at all factors that impact the development of students. The physical, intellectual, and emotional aspects of the environment must be considered. The environment of the classroom and the inhabitants of that environment (the students and the teachers) are constantly interacting and impacting each other, creating an ecological system. The characteristics of the classroom and the tasks and needs of the teachers and students all influence the classroom learning environment (Epanchin, Townsend, & Stoddard, 1994). It is also important to consider that students do not live in a vacuum. They are each impacted by their families and the community in which they live.

This article will explore the creation and implementation of a safe, supportive learning environment in terms of all three components: the physical, intellectual, and emotional environment. Examples of strategies for implementing all three aspects of Standard 7, Learning Environment will be presented. Connections to other standards, primarily Standard 5, Curriculum Development; Standard 6, Instructional Strategies and Resources and Standard 9, Student and Program Assessment are made. An annotated list of resources is also provided.
Learning Environment

Humans have certain basic needs beyond the physical needs of air, water, food, and shelter. Erwin (2004) identifies these needs as survival, love and belonging, power, freedom, and fun. Understanding these needs provides “a solid foundation for creating and managing a high-quality learning environment” (p. 19). Teachers, aware of these needs and working with them in mind, can create an environment where students feel safe and are free to learn, explore, and create. An environment that does not provide for the needs of students results in frustration for students and teachers, and an environment that does not promote learning.

The Physical Learning Environment: Research and Theory

In the classroom of the past, the teacher’s desk, situated at the front of the room, faced orderly rows of students who sat at desk/chair combinations. These classrooms were designed to focus the students’ attention on the teacher and encouraged minimum interaction among students. The room was expected to be orderly and very quiet. Should the principal hear noise or, even worse, laughter coming from the room, the teacher was taken to task. There has been a dramatic change in the classroom of today. Narum (2004) suggests that the learning environment needs to reflect the school’s mission and should plan for an environment that encourages active engagement and a community of learning. The room needs to be versatile (one in which students can do many things) and flexible (easily adapted to changing needs). The importance of furniture, fixtures, and equipment in creating a positive learning environment was explored by Rydeen and Erickson (2002). They suggest that these elements of the environment can help create community, ownership, comfort, security, aesthetics, privacy, and a sense of place.

Education in the United States is moving from a “teacher as authority and purveyor of knowledge” mode to a more collaborative learning model. With this change, the physical environment of the classroom must reflect the collaborative model. Kelly (2004) presents classroom design that supports collaborative learning. Classrooms should provide a physical environment that brings students and teachers together to discuss content, exchange thoughts, communicate, and debate. There also needs to be workstations with resources and computer access for individual work, and areas for group work. Graetz and Goliber (2002) are very specific in their description of the ideal space for collaborative learning. The room should have a level floor, movable seats and tables, writing surfaces on a minimum of three walls, and controlled acoustics. Aspden and Helm (2004) recommend a blended approach when designing classrooms, providing a flexible environment for both technical and traditional approaches to education. The key to success is creating an environment that facilitates connections and engagement between students and other aspects of the learning experience. In this philosophy, effectiveness depends upon the active participation of all individuals involved in the education process.

When creating the physical environment to promote maximum learning, the elements of lighting, temperature, space, and noise must all be considered (Graetz & Goliber, 2002). Heat is known to aggravate feelings of hostility in humans. Therefore, keeping the classroom cool is recommended. Full-spectrum fluorescent lighting or daylight is also optimum. When considering space and noise, it is noteworthy that the ideal levels of both physical conditions are relative. The amount of space needed by the individual student is the “personal space” as defined by culture. In some instances, students with several feet of personal space may feel crowded. Other students may feel very comfortable with the same amount of space. The type of learning activity also impacts the amount of space and the level of noise that is comfortable to students. When
listening to and watching a presentation, students need more space and a low level of noise in the room. However, the same students, engaged in a group project and actively exploring and exchanging ideas, will be comfortable with less space and a higher level of noise in the classroom.

The process of creating a physical environment for learning must always consider the needs of mainstreamed students with physical disabilities. In the past, the focus has been on the students and their personal abilities, rather than the physical environment of the school (Hemmingson & Borell, 2002). Proactive planning can create an environment that reduces both physical and social barriers in educational settings.

**Figure 1. The Physical Learning Environment: Practical Application of Theory**

<table>
<thead>
<tr>
<th>Physical Learning Environment</th>
<th>Suggested Techniques for Addressing the Issue</th>
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<tbody>
<tr>
<td>The classroom needs a design that supports collaborative learning.</td>
<td>1. Provide an area for display of students’ work. 2. Carefully determine chair placement and seating assignments (Wong &amp; Wong, 1998). 3. Arrange the classroom so that the resources needed for an activity are close to the learning area. 4. Develop procedures for the handing of equipment and supplies and communicate your expectations to the students.</td>
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<td>The physical elements of light, space, temperature, and noise must be addressed.</td>
<td>1. Family and consumer sciences classrooms can appeal to all of the senses, including the sense of smell. For example, baking bread or apple pie on the day students sign up for next year’s classes is guaranteed to increase enrollment! 2. Bring nature into the room. Plants and flowers add life to the room and can improve the air quality. However, remember that many people are sensitive to strong aromas, so stick to flowers with mild or no fragrance. 3. Music can set the tone for the class but needs to be carefully chosen (Gardner, 1999). 4. Should the teacher be unable to control all the physical elements of the room, providing students with interesting, meaningful learning experiences can help them focus on the task rather than the temperature, light, space, or noise.</td>
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<td>The classroom must address the physical needs of all students, including students with physical limitations.</td>
<td>1. Be aware of the standards for classroom accessibility and the needs of your students (Gorleski, 2006). 2. Make a plan for needed changes and present it to the school administration. Be prepared to write a grant, if necessary. 3. Be creative, often simple adaptations can be made to standard equipment to allow students with physical limitations to participate in classroom activities.</td>
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**The Intellectual Learning Environment**

The intellectual environment of the classroom includes the standards, expectations, objectives, learning strategies, and assessment that are expressed directly through the written curriculum and covertly through the hidden curriculum. Individual differences among students and teachers need to be recognized and addressed, including learning styles, abilities, interests, and intelligences (Gardner, 1999).

Cookson (2005) advises new teachers, “your classroom has a huge impact on your students’ intellectual and emotional growth” (p. 10). The challenging environment, necessary for active learning and an enriched environment is based on four elements: problem solving, relevant
projects, critical thinking, and complex activities. These challenging learning experiences need to be the focal point of the classroom, and extend out of the classroom into the rest of the community (Oblinger, 2006).

*Family and consumer sciences education national standards* identified four process competencies. Thinking (including problem solving and critical thought) is identified as a key process competency to be taught in all family and consumer sciences courses. Critical thought is purposeful and systematic, and analyzes “explanations and arguments in order to identify premises and conclusions; to distinguish among opinion, reasoned judgment, and fact; and to recognize underlying assumptions, biases, and values” (National Association of State Administrators for Family and Consumer Sciences, 1998, p. 18). The other three process competencies taught in family and consumer sciences classrooms are leadership, management, and communication. The development of leadership skills provides an opportunity for students to develop a sense of autonomy. Stefanou, Perencevich, DiCintio, and Turner (2004) suggest that, in addition to classroom instruction and activities, teachers need to provide support to facilitate the development of student autonomy. The skills developed through opportunities for management and communication provides students with the practical experience necessary for problem-solving, thinking and leadership. Curriculum planning that includes these four competencies leads teachers to develop lessons and learning experiences that are problem-based, challenging, and support active learning.

Curriculum developed to challenge all students in the classroom must reflect the individual differences, cognitive styles, and learning preferences of every student. Gardner (1999) identifies nine intelligences possessed by people; each person has all nine intelligences, but at varying levels of ability and in different patterns. Other learning style theories include: whole-to-part/part-to-whole learners; visual versus auditory approaches; field-dependent/field-independent learners; and impulsive/reflective cognitive styles (Kearsley, 2006).

Wolfolk (1998) prefers the use of the term “learning preferences” over “learning styles” and after a study of many different preferences, has identified one theme that unites most of the various styles – a difference between deep and surface approaches to processing information in learning situations. Students who have a deep-processing approach to learning search for underlying concepts or meaning, and tend to learn for the sake of learning. In contrast, students who take the surface-processing approach will focus on memorizing facts rather than understanding them. These students are motivated by grades and other external rewards.

It is a daunting task to prepare curriculum and lesson plans that consider the learning styles and preferences of every student in the class. It may be more important to remember two things. First, even though students may have preferences for specific ways of learning, they may not choose the way that is most effective. Students, particularly those who struggle with learning, may opt for the easiest style rather than the one that would challenge them and help them grow and learn. Second, lessons that are planned with a variety of learning strategies to teach a concept will, over a period of time, reach all the students in the classroom. Keeping students engaged in active, meaningful learning with a variety of approaches will help ensure that all students are given the opportunity and encouragement to learn (Wolfolk, 1998).
**Figure 2. The Intellectual Learning Environment: Practical Application of the Theory**

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<tr>
<th>Intellectual Learning Environment</th>
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<td>A stimulating learning environment teaches the students to think.</td>
<td>1. Questions are the key to stimulating thought in students and need to be carefully planned with the students’ needs and the teacher’s objectives in mind (Kobrin, 2004).</td>
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<td>2. Questions that stimulate thinking often ask the students to sort, classify, differentiate, explain, imagine, solve, or brainstorm (Harmin, 1994).</td>
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<td>3. Problem-solving is encouraged with the use of scenarios and case studies, and can help the students transfer the concept from the classroom to their personal lives.</td>
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<td>4. Discussions can help the students think, identify personal beliefs and values, and communicate with others. It is important to structure the discussion to proceed in the direction desired and to give all students the opportunity to participate. Suggested strategies to promote equal participation include: “Whip Around – Pass Option” (the teacher asks a question and goes around the room, giving each student the opportunity to share an idea or pass); “Question, All Write” (the teacher asks a question, then provides the students with the time to write their ideas – this is an excellent technique for starting a class and introducing the day’s topic); “Outcome Sentences” (following a discussion or presentation of material, students are asked open-ended questions on which they may reflect and write); “Voting” (students are asked to vote, using raised hands, thumbs-up/thumbs-down, or voting cards); “Sharing Pairs” (students are paired and given time to share their ideas with a classmate, a particularly effective technique to use with shy students) (Harmin, 1994).</td>
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<td>5. Graphic organizers (mind-maps, diagrams, t-charts, etc.) can help students connect ideas and concepts, organize them visually, and develop meaning.</td>
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Teaching strategies should reflect a variety of approaches, determined by the needs of the students and the concept being taught.

1. Using a variety of teaching strategies brings interest to the lesson and reflects respect for students’ different learning preferences.
2. Contracts, individualized instruction, and collaborative learning provide for successful learning by all students.
3. Assessment strategies should provide an opportunity for all students to demonstrate what they have learned in the classroom. A variety of techniques may be needed in order to meet that goal.
4. The curriculum, including learning objectives, teaching strategies, student engagement, and assessment must focus on the needs of the students and the concept being taught.

**The Emotional Learning Environment**

The emotional environment of the classroom is comprised of feelings of safety, support, and respect. Management, discipline, and motivation are important aspects of the emotional environment. The cultural impact is also important to recognize. This includes diversity in social class, race, ethnicity, and gender (Woolfolk, 1998).

The role of emotions in learning is rooted in the physical composition of the brain itself. The portion of the brain that regulates emotion and memory is the limbic system, located between the R-complex (consisting largely of the brain stem, the portion of brain concerned primarily with physical survival) and the neocortex (or “thinking brain”). Because of its location and function, the limbic system has a primary role in determining what is learned and remembered (Caine & Caine, 1994; Sylwester, 1995). The limbic system can help the brain associate events with emotions. If the emotions are pleasant, or provide a manageable level of stress, the students place the facts associated with the events in long-term memory storage. If the
level of stress is not manageable, or the brain perceives the situation as a threat, the brain will “downshift,” shutting down the neocortex and reverting to the use of the R-complex for survival. The R-complex is not the thinking portion of the brain, and the students will not learn.

For example, people can normally recall what they did on their previous birthday, or Christmas Day, or the first day of school. Most people recall what they were doing when they heard of the attacks on the World Trade Center on September 11, 2001. These events are associated with emotions, stimulate the limbic system, and are placed into long-term memory storage. Inversely, few people can remember what they ate for dinner two weeks ago, what happened the week before their birthday, or what they were doing on the third day of the Winter Olympics in Salt Lake City. These events were not associated with strong emotions (unless you were participating in Olympic Alpine Skiing), and were not placed into long-term memory.

Under high levels of stress, caused by such things as physical threats, hunger, abuse, unrealistic expectations, and grief, a human being does not learn. The mind shuts down to focus on survival. Emotions play a key role in the physical process of learning and must be included in the creation of the learning environment.

Morris (2004) discusses the impact of brain research on the design of lessons, particularly the significance of the stimulation of good emotional responses to the retention of information by students. Rock (2004) takes the role of emotion in the classroom one step further, suggesting that educators need to teach students the skills, abilities, and knowledge that lead to the development of emotional competency. VanDeWeghe (2006) addresses the importance of student engagement in the process of learning, and divides “engagement” into three types: behavioral, cognitive, and emotional.

In order for students to participate fully in the educational process, they must feel safe. Beyond physical safety, the students need to feel that unique, individual differences are accepted and respected. These differences include diversity in social class, race, ethnicity, and gender. The feeling of safety should be reflected in both teacher-to-student and student-to-student interactions (Canter & Associates, 1998).

Wolfolk (1998) identifies five aspects of education designed to address the needs of a diverse population. The first, and most familiar, is the need for content integration in which the teacher uses examples and content from a variety of cultures and groups. The second is the knowledge construction process that helps students understand how cultural assumptions within a content area influence how knowledge is constructed within that culture. Third, diversity education should reduce prejudice by identifying characteristics of students’ racial attitudes and exploring how teaching techniques can modify these attitudes. The fourth aspect of diversity education is an examination of the school culture and the group and labeling practices, extracurricular participation, and staff-student interactions. The goal of this process is the development of an empowering school culture that respects and enhances every student. The final aspect of diversity education is a pedagogy that promotes equity among students. Teachers need to match teaching styles to students’ learning styles, creating a classroom environment in which all students can learn.
### Figure 3. The Emotional Learning Environment: Practical Application of the Theory

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<thead>
<tr>
<th>Emotional Learning Environment</th>
<th>Suggested Techniques for Addressing the Issue</th>
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<tr>
<td>Students must feel safe within the learning environment.</td>
<td>1. Clearly present the classroom expectations and rules.</td>
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<td>2. Plan a variety of “getting-to-know-you” activities for the beginning of the course to foster a sense of community within the classroom.</td>
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<td>3. Establish an atmosphere of trust between students and the teacher. As often as possible, use the students’ names. Respond positively to students’ ideas. Pay attention to students’ moods. Focus on student’s strengths and positive qualities. Provide positive feedback, to the students, and to the students’ parents. Respect the students’ right to try new approaches, and to fail (Canter &amp; Associates, 1998).</td>
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<td>4. It is equally important to develop student-to-student trust. Model the belief that all students have the right to learn in a safe, peaceful classroom. Every student has the right to express ideas and opinions. Each student can contribute by showing respect and consideration for others.</td>
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<td>5. Create a time for a community circle where students can discuss issues of importance to the group. Students can ask questions and raise issues to the group, or the teacher can provide a container where students can place anonymous notes throughout the day.</td>
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<td>6. Use mistakes as a springboard for learning and risk-taking. Errors made in the laboratory setting are perfect examples to use for creative problem solving. Reassure students that mistakes often teach much more than perfection.</td>
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<td>7. Make time for classroom celebrations. Create a bulletin board that displays individual and group successes.</td>
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<td>8. Capture collective memories by taking and displaying pictures of activities, projects, and students’ work.</td>
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<td>Students must feel that their individual differences are respected.</td>
<td>1. Plan opportunities for students to share experiences and values. Always thank students for sharing.</td>
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<td>2. Curricular materials, displays, and art work in the room should depict a variety of individuals, examples, and values that respect diversity among people.</td>
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<td>3. Help students develop empathy by asking questions and making statements that encourage students to see things from others’ perspectives.</td>
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<td>Teachers must provide for personal emotional support.</td>
<td>1. Participate in a support group of other teachers with a similar amount of experience.</td>
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<td>2. Find a mentor.</td>
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<td>4. Participate in professional development activities.</td>
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<td>5. Appreciate and reaffirm yourself (Hodges, 2002).</td>
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### Integration of the Classroom Environment with the Other National Standards for Teachers of Family and Consumer Sciences

The *National Standards for Teachers of Family and Consumer Sciences* are integrative in nature. Teaching the standards that address family and consumer sciences content is dependent upon the established learning environment. The learning environment, created by the teacher, provides the backdrop for all of the instruction. A rich, vibrant culture of learning, established in an environment that provides for the physical, intellectual, and emotional need of the students, enables the students and teacher to focus on the content; its meaning in individual lives; and the use of that content in solving problems of individuals, families, and communities. It is through
the choice of curriculum, instructional strategies, and assessment that the learning environment of the classroom is established.

**Learning Environment Assessment**

Danielson (1996) has developed rubrics for the assessment of the components of teaching. Four domains are presented, including domain two: the classroom environment. The importance of creating a positive learning environment of respect and rapport is explained:

Teachers create an environment of respect and rapport in their classrooms by the ways they interact with students and by the interaction they encourage and cultivate among students. In a respectful environment, *all* students feel valued and safe. They know they will be treated with dignity, even when they take intellectual risks. High levels of respect and rapport are sometimes characterized by friendliness and openness, and frequently by humor, but never by a teacher forgetting her role as an adult. (p. 79)

Five components of classroom environment are identified and described by Danielson (1996): (a) creating an environment of respect and rapport; (b) establishing a culture of learning; (c) managing classroom procedures; (d) managing student behavior; and (e) organizing physical space. Each of these components is further broken down into specific elements, with detailed descriptions of observable characteristics that describe unsatisfactory, basic, proficient, and distinguished performance levels. Figure 4 is an example of one element included in the organizing of physical space.

**Figure 4.**

<table>
<thead>
<tr>
<th>Element</th>
<th>Unsatisfactory</th>
<th>Basic</th>
<th>Proficient</th>
<th>Distinguished</th>
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<tbody>
<tr>
<td>Accessibility to Learning and Use of Physical Resources</td>
<td>Teacher uses physical resources poorly, or learning is not accessible to some students.</td>
<td>Teacher uses physical resources adequately, and at least essential learning is accessible to all students.</td>
<td>Teacher uses physical resources skillfully, and all learning is equally accessible to all students.</td>
<td>Both teacher and students use physical resources optimally, and students ensure that all learning is equally accessible to all students.</td>
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Quoted from: Danielson, 1996, p. 89

It is noteworthy that beginning teachers would be expected to perform at the “basic” level, occasionally demonstrating “proficient” skills. Only master teachers would be expected to perform at the “distinguished” level. However, providing new teachers with a rubric that describes graduated performance levels, helps them set goals and envision the behaviors that would allow them to attain those goals.

Certainly, Danielson’s rubric is not the only tool for assessing the learning environment created by a new teacher. Teachers, departments, school systems, and individual states are encouraged to create or adapt an assessment tool that meets individual needs; however, it is reassuring to know that one does not have to begin the daunting task from scratch. Danielson’s work is an effective, useful beginning for the assessment process.
Suggested Readings

Following is a list of suggested readings for teachers interested in exploring the topic of learning environments. Many of the books include very practical suggestions and activities designed to improve the classroom environment.


References


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