

# *Report of the Classroom Renovation Task Force*

**September 20, 2004**

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The complete report is available on-line at: <http://casweb.ou.edu/crtf/report.pdf>  
Comments on this report are welcome at [cas@ou.edu](mailto:cas@ou.edu).

## ONE OF THE BEST CLASSROOMS ON THE NORMAN CAMPUS



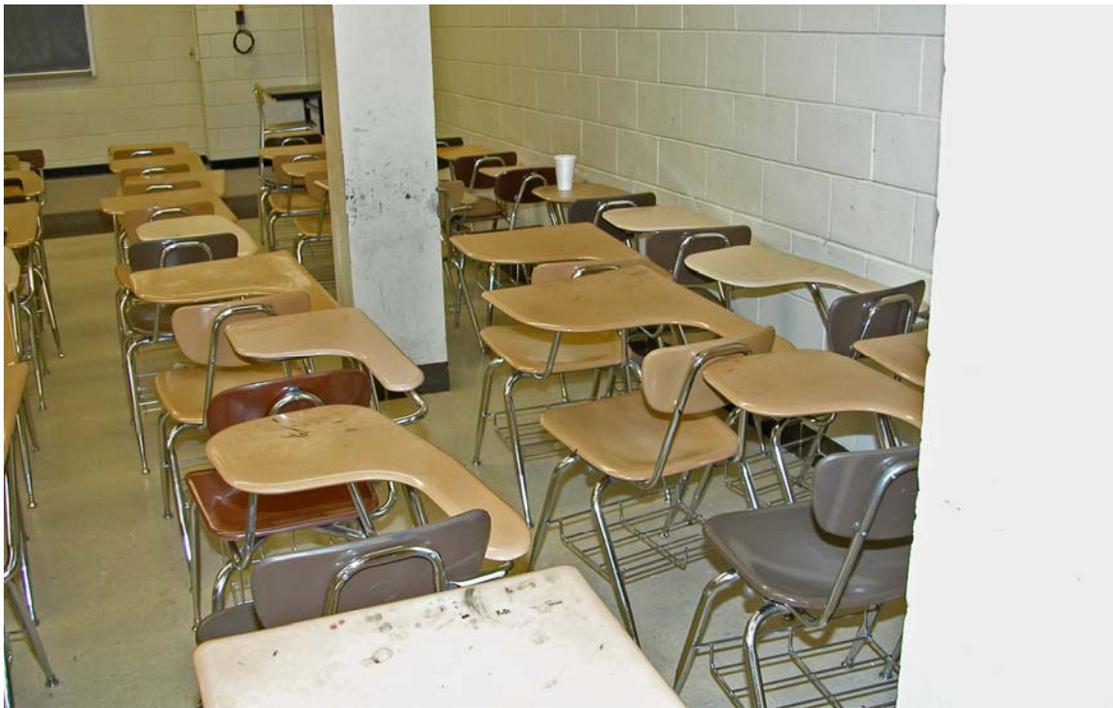
**Nielsen Hall A102** – One of students' favorite classrooms. Above: Its 225 seats are tiered and have continuous table tops (counters). Below: Each seat has an electrical outlet and a high speed internet connection. It has three digital projectors and 2 drop-down screens that only partially cover the 9 separate slate blackboards.



### One of the Worst Classrooms on the Norman Campus



**Dale Hall 116.** One of the students' least favorite classrooms. Its 95 tablet-arm chairs are so closely spaced that it is hard to walk between them and visibility is limited by posts (below). It has one digital projector and a small drop-down screen that is difficult to see from the rear of the room.



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## Section 1

# Executive Summary



**Kaufman 234.** This 40 seat classroom is overcrowded with tablet-arm chairs. It has no digital projector. The TV in the corner has a VCR player and is difficult to see from every seat in the room.

The Classroom Renovation Task Force was formed in the summer of 2003 and charged by the Provost to investigate all aspects of the Norman campus classrooms and provide prioritized recommendations for improvement. This report summarizes the results of that effort, which has drawn on classroom visits, data from various administrative offices and the results of separate on-line surveys of faculty and students.

Since the last classroom study over 10 years ago, there has been a deterioration of the condition of the classrooms on the Norman campus. In general classrooms are seen by faculty and students as being overcrowded, dirty and poorly maintained, with uncomfortable seating, inadequate technology and a physical environment that detracts from teaching and learning. A burgeoning student population coupled with a net loss of classrooms over the last 10 years has also created acute pressure on classroom availability. The scarcity of classrooms affects the number of classes that can be offered and threatens students' ability to graduate in a timely manner.

On the basis of the survey results, an ideal classroom would have the following characteristics:

- Comfortable seating, preferably padded.
- Desk surface area large enough to hold a notebook, a textbook and a laptop computer at the same time.
- Unrestricted visibility of the instructor and the various boards and projection screens from any seat in the room.
- Enough space between seats to give students adequate "elbow room" and enough circulation space to allow easy movement between rows of chairs.
- A good selection of basic instructional technology options, including: whiteboards or high quality blackboards; video projectors and projection screens that are sufficiently large to be seen clearly from any seat in the room; VCR and DVD players; and easy hook-ups for an instructor's portable computer or an in-class computer.
- Internet connections, preferably wireless, and electrical outlets for students' lap top computers.
- The ability to control the level of lighting on a continuum and good lighting, including windows for daylight.
- Good acoustics and a good quality amplified sound system for larger rooms.
- The absence of extraneous noise from outside the classroom or from the air handling system.
- The ability to control the temperature in the room.
- A clock with accurate time that is visible to the students and instructor.
- Clean and orderly with everything in good repair and in working order.
- Accessibility by students and instructors with disabilities.

On the basis of analysis and discussion, the Task Force arrived at the following set of recommendations:

1. Create a student fee to fund classroom renovation and construction.
2. Make classrooms a targeted category for private funding.
3. Adopt and implement basic minimum standards for classroom configuration and begin an aggressive program to bring existing classrooms up to these standards.
4. Construct new classrooms and renovate existing classrooms.
5. Develop and implement a basic standard for instructional technology in all centrally scheduled classrooms.
6. Develop a system for assisting faculty with the use of instructional technology.
7. Establish a regular program of classroom cleaning, inspection and maintenance.
8. Enlist students in helping to maintain classrooms.
9. Establish a standing Classroom Committee.
10. Improve Classroom Scheduling.

## SECTION 2

**RECOMMENDATIONS OF THE CLASSROOM  
RENOVATION TASK FORCE**

**Adams 104.** A popular 67-seat classroom with fixed seating and a continuous tabletop (counter). It has a single digital projector and a drop-down screen that, when in use, blocks the center of the blackboard.

### **1. Create a student fee to fund classroom renovation and construction.**

The Task Force recommends creating a student fee to fund renovation of existing classrooms and to provide a source of revenue to build new classrooms. Specifically:

- The Task Force recommends that the fee be set initially at \$5 per credit hour, which would generate approximately \$2.5 million annually.
- The first priority for the use of these funds should be to begin a multi-year process of renovating existing centrally scheduled classrooms and bringing them up to minimum standards.
- As existing classrooms are increasingly brought up to minimum standards, a portion of the fee collected each year should be set aside to assist in the construction of new classrooms.

### **2. Make classrooms a targeted category for private funding.**

The Task Force recommends that private donations be sought from individuals, corporations and foundations to fund the maintenance and renovation of existing classrooms and construction of new classrooms. Suggestions include:

- funding in exchange for naming of rooms
- funding in exchange for plaques on the back of chairs
- working with Development to establish a foundation account and to add “Classroom Improvements” as a choice during the Campus Campaign and other fundraising efforts

### **3. Construct new classrooms and renovate existing classrooms.**

The Task Force recommends that the university construct a new, centrally located, state-of-the art classroom building, to include at least one large lecture hall and a mixture of smaller classrooms. The university should also make it a priority to renovate the existing classrooms and to build new classrooms in existing buildings through renovation of space now used for other purposes.

Also, as new classrooms are constructed or renovated, office space should also be set aside to house support staff who can provide on-call technical support for the classes in the building and to maintain the installed technology.

Increasing the number of classrooms through new construction and renovation is critical not only to ensure that there are enough classrooms to meet the instructional needs of the university, but also to allow some classrooms to be closed each semester for maintenance and renovation.

### **4. Adopt and implement basic minimum standards for classroom configuration and begin an aggressive program to bring existing classrooms up to these standards.**

The Task Force recommends adopting a general set of standards for the configuration of Norman campus classrooms, to include the following:

- replacing all tablet-arm chairs with seating that is comfortable and provides adequate desk surface area to hold a laptop computer, a notebook and a text book simultaneously
- Although a variety of different types of classrooms are needed and the nature of the seating would vary with room size and function, the proposed basic standard would be:
  - for smaller classroom (approximately 60 or fewer seats) with flat floors: moveable tables and chairs or moveable chairs with large fixed desks;

- for smaller classroom (approximately 60 or fewer seats) with tiers: fixed tables or counters with moveable chairs;
- for larger lecture halls: tiered seating with fixed tables or counters and either moveable or fixed chairs.
- establishing a reasonable standard for the number of seats per classroom. The Task Force recommends a target of 1 seat per 20 sq. ft.
- limiting the depth of new classrooms to no more than 1.5 times their width.
- insuring that all classrooms are arranged in such a way that all students can see and hear the instructor and all presentations clearly
- ensuring that all classrooms are equipped with dimmable lights and that the lights are of adequate quality and intensity
- ensuring that classrooms are accessible to all persons and that those with disabilities are provided with appropriate seating and are not segregated at the rear of the room.
- providing systems for better control of temperature
- making pencil sharpeners available in or near all classrooms
- providing every classroom with an accurate clock
- providing space or means for students to hang or stow their backpacks and coats
- placing an adequate number of large trash containers both inside and outside of classrooms

**5. Develop and implement a basic standard for instructional technology in all centrally scheduled classrooms.**

To ensure that every centrally scheduled classroom provides faculty and students with adequate instructional technology options, the Task Force recommends that the University:

- adopt and implement a campus-wide standard for a basic suite of instructional technology for various types of classrooms. Although there may be variations, depending on the size, configuration and purpose of the room, the basic suite should include:
  - high quality blackboards and/or whiteboards
  - projection or plasma screens for projecting computer-based presentations
  - DVD and VHS projection or playback capability
  - in-class computers or easy hook-ups for an instructor's laptop
  - high speed internet connections, preferably wireless, in all classrooms
  - a sound system that allows the instructor to hear students and students to hear the instructor
  - positioning of screens and boards so that they can be used simultaneously
- adopt a campus-wide standard for smart interfaces in classrooms that will allow an instructor to activate the A/V equipment in a classroom, including hooking up a laptop computer, and be prepared to make an in-class presentation in less than 5 minutes.
- establish a program for reviewing and making recommendations about technology in classrooms on a revolving basis.

**6. Develop a system for assisting faculty with the use of instructional technology.**

The Task Force recommends the implementation of strategies to maximize the ability of faculty to use instructional technology in the classrooms, including:

- developing and implementing a quick response system for on-call trouble-shooting of problems with classroom technology
- creating a formal program for the training of faculty in the use of instructional technology

### **7. Establish a regular program of classroom cleaning, inspection and maintenance.**

Physical Plant should be charged with and funded to establish a program for the regular inspection, maintenance, and cleaning of classrooms. The budget should include funds to:

- clean all classrooms at least once a day and cleaning of blackboards and whiteboards at least twice a day
- inspect all classrooms at least twice a year and develop a plan for repairing or replacing broken equipment and facilities
- develop and operate a web-based system for faculty and students to report classroom maintenance problems

### **8. Enlist students in helping to maintain classrooms.**

The Task Force recommends that OU students be enlisted in a sustained effort to keep classrooms clean and to report maintenance problems. Specifically, the University should:

- develop a student-based initiative to keep classrooms clean
- include classroom clean-up as part of the “Big Event”
- encourage students to use the on-line system for reporting classroom maintenance problems

### **9. Establish a standing Classroom Committee.**

The Task Force recommends that a permanent standing committee on classrooms be established. The committee would report to the Senior Vice President and Provost and be charged:

- to solicit input from faculty and students on the status and needs for classroom improvements.
- to conduct an annual survey of classrooms to determine their current condition and the accessibility to classrooms of persons with disabilities
- to make recommendations to regarding priorities for the use of funds from the classroom fee and other sources to maintain, improve and construct classrooms
- to establish standards for classroom design to guide renovation and construction of classrooms
- to review and make recommendations about upgrading classroom technology standards

The Task Force further recommends that the membership of the Classroom Committee be as follows:

- Vice Provost for Instruction, chair
- Faculty – three members appointed by Faculty Senate
- Undergraduate Students – one appointed by UOSA
- Graduate students – one appointed by the Graduate Student Senate
- Physical Plant – one representative appointed by the director
- Information Technology - one representative appointed by the Vice President for Information Technology
- Information Technology Council – one representative
- Manager of Classroom Scheduling
- Manager of Registration
- Director of the Office of Disability Services
- Director of the Instructional Development Program
- Assistant to the Provost

**10. Improve Classroom Scheduling.**

The Task Force recommends that the University take the following steps to improve the process by which Norman campus classrooms are scheduled:

- purchase and implement an on-line computerized classroom scheduling system. In addition to allowing the process of scheduling rooms to be automated, the system should provide faculty and staff with the ability to:
  - view scheduling and availability of rooms
  - view information about size of rooms and equipment
  - reserve available rooms for seminars, review sessions and other academic purposes
- encourage departments and colleges to allow Classroom Scheduling to schedule as many departmentally controlled rooms as possible, while giving the controlling unit priority for scheduling
- establish a system to coordinate the scheduling of class offerings across departments and colleges so as to minimize conflicts in student's class schedules

## SECTION 3

# INTRODUCTION



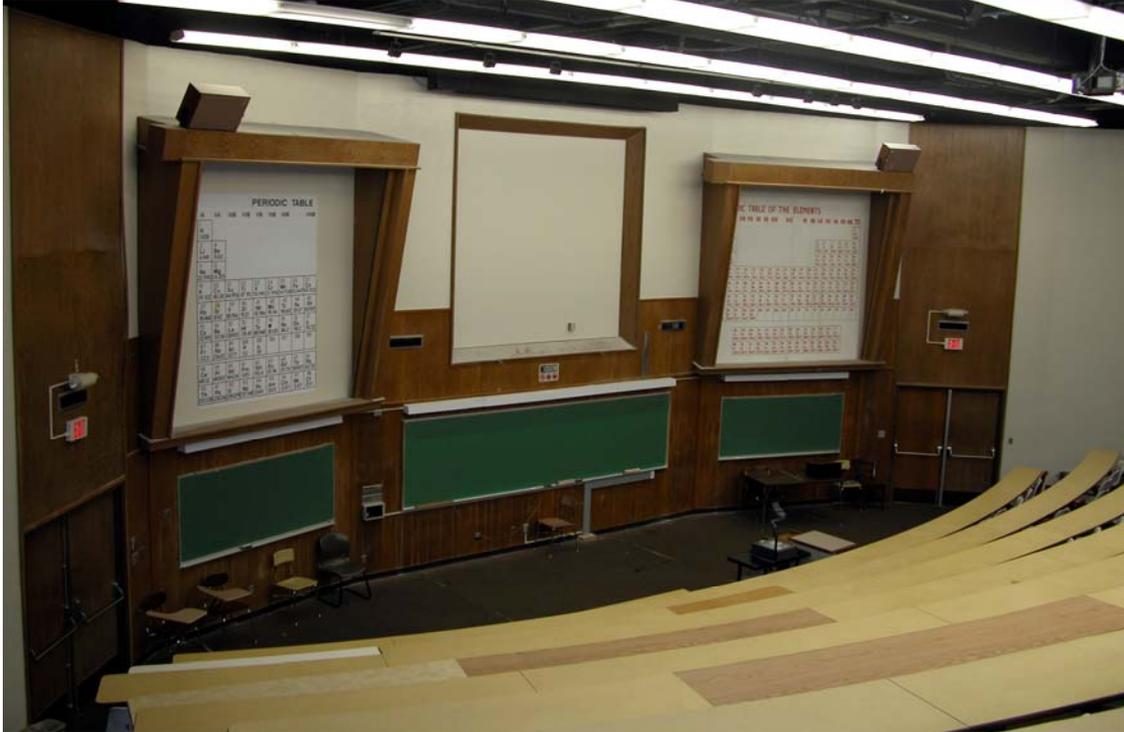
**Adams 150.** A popular 282-seat classroom with fixed seating and a continuous table top (counter). There are three digital projectors and three drop-down screens that, when down, leave the blackboard partially useable.

The Classroom Renovation Task Force was established by Provost and Senior Vice President Nancy Mergler during the summer of 2003 and charged (1) to investigate all aspects of classrooms on the Norman campus and (2) to make prioritized recommendations to the Provost and the campus community on what should be done to improved the classrooms.

The members of the Task Force met over the summer and throughout the Fall and Spring semesters of the 2003-2004 academic year. The initial project was to visit representative classrooms to get a first-hand picture of the current state of classrooms. In Fall 2003 the committee carried out two on-line surveys to determine the perceptions of the faculty and students, respectively, regarding the condition of Norman campus classrooms and to solicit their input as to their priorities for improving the condition of the classrooms. In addition the Task Force obtained information from Classroom Scheduling, Physical Plant and the Office of Disability Services regarding the number, availability, characteristics and accessibility of classrooms.

## SECTION 4

## GENERAL FINDINGS



**Physical Sciences Center 201.** One of the students' least popular rooms. It is equipped with 275 fixed seats in very steep tiers, continuous table tops (counters), a single digital projector and a central screen. It is unpopular because the plastic seats (below) are uncomfortable, the tiers are too steep and the room is so deep that it is difficult for students in the back to see the boards and screen clearly. Poor acoustics also make communication between students and the instructor difficult.



## I. NUMBER OF CLASSROOMS

To serve a student population of 22,500 (Fall 03), there are 131 centrally scheduled classrooms on the Norman campus (Tables 1) distributed among 21 buildings (Table 2). Most of the classrooms are of medium size. Just over half of the classrooms contain between 25 and 49 seats and an additional 24 rooms contain between 50 and 75 seats. There are relatively few large lecture halls and small classrooms.

In addition to the centrally scheduled classrooms there are an additional 235 rooms under the control of academic units and not available for scheduling by Classroom Scheduling (Table 3). Most of these rooms (142) are teaching laboratories, and an additional 41 are departmental seminar rooms, used for faculty meetings, seminars, graduate classes and other purposes. The remaining 52 non-centrally scheduled classrooms are controlled by a wide variety of academic units. The largest number (24) are controlled by the College of Continuing Education and located in the Center for Continuing Education, in Cross Center, and on North Campus. The units with the largest number of classrooms on the central campus are the School of Music (11), the School of Art (7), the College of Law (5), the school of Drama (4), Air Force ROTC (3), the College of Architecture (3), the Department of Health and Exercise Science (3), the Honors College (3) and the School of Social Work (3).

Over the past several years there has been a history of successful cooperation between some academic units and Classroom Scheduling to allow departmentally controlled rooms to be centrally scheduled. Currently, 13 of the 131 centrally scheduled classrooms are controlled by academic units. In return for the rooms' being equipped and maintained with central funds and the unit's having first priority for scheduling classes, classroom scheduling is allowed to schedule additional classes at times when the room is free. Units participating in this sharing of resources are the College of Engineering (3 rooms), Economics (2 rooms), English (1 room), Library and Information Studies (1 room), Military Science and Naval Science (3 rooms), Philosophy (1 room), Regional and City Planning (1 room) and Zoology (1 room).

On a positive note, completion of current construction will add 11 much needed classrooms and one seminar room to the Norman campus classroom inventory. Completion of Gaylord Hall in Fall 04 will add a 20 seat seminar room, a 54 seat tiered classroom and a 60-seat tiered classroom. Completion of Price Hall, scheduled for Spring 05, will add one 30-seat flat classroom, six 48-seat tiered classrooms, two 64-seat tiered classrooms.

**Table 1. Centrally-Scheduled Classrooms**

<b>Number of Seats</b>	<b>Classrooms</b>	<b>Seminar Rooms</b>	<b>Laboratories</b>	<b>Total Rooms</b>
<b>1 - 24</b>	<b>3</b>	<b>10</b>		<b>13</b>
<b>25 - 49</b>	<b>66</b>	<b>1</b>		<b>67</b>
<b>50 - 75</b>	<b>24</b>			<b>24</b>
<b>76 - 101</b>	<b>11</b>			<b>11</b>
<b>120 - 150</b>	<b>3</b>			<b>3</b>
<b>156 - 180</b>	<b>4</b>			<b>4</b>
<b>217-282</b>	<b>6</b>			<b>6</b>
<b>310 - 573</b>	<b>3</b>			<b>3</b>
<b>Total Rooms</b>	<b>120</b>	<b>11</b>	<b>0</b>	<b>131</b>

**Table 2. Centrally Scheduled Classrooms by Building**

<b>Building</b>	<b>Size of Room (Number of Seats)</b>								<b>TOTALS</b>
	1-24	25-49	50-75	76-101	120-150	156-180	217-282	310-573	
Physical Sciences	1	13	7	1		1	1		24
Adams	2	7	1	2		1	1		14
Kaufman	2	11							13
Dale			1	2	2	2	2	2	11
Sarkeys	1	5	2	3					11
Carson		4	3		1				8
Burton	1	5	1						7
Gittinger		6	1						7
Bizzell	4	2							6
Felgar	1	3	2						6
Dale Tower		4							4
Armory		3							3
George Lynn Cross				2			1		3
Gould			2	1					3
Nielsen			1				1	1	3
Copeland		2							2
Hester	1	1							2
Carnegie		1							1
Carpenter			1						1
Jacobson			1						1
Sutton			1						1
<b>TOTALS</b>	13	67	24	11	3	4	6	3	131

**Table 3. Non-centrally Scheduled Classrooms**

<b>Number of Seats</b>	<b>Classrooms</b>	<b>Seminar Rooms</b>	<b>Laboratories</b>	<b>Total Rooms</b>
<b>1 - 24</b>	14	35	92	<b>141</b>
<b>25 - 49</b>	28	6	44	<b>78</b>
<b>50 - 75</b>	7		6	<b>13</b>
<b>76 - UP</b>	3			<b>3</b>
<b>Total Rooms</b>	<b>52</b>	<b>41</b>	<b>142</b>	<b>235</b>

## II. Classroom Availability

Data from the Office of Classroom Scheduling for Fall 03 (Table 4) shows that classrooms are heavily booked on weekdays between 8:30 a.m. and 4:15 pm. On Tuesdays and Thursdays, the 51 classrooms that seat 50 or more students are fully booked between 9:00 a.m. and 4:15 p.m., except for 3 large classrooms that are free after 3:00 p.m. The situation is somewhat better on Monday, Wednesday and Friday mornings, but classrooms are almost fully booked in the afternoons. There are classrooms of all sizes available before 8:30 a.m. and after 4:30 p.m., but the number has been decreasing over the past several years as more and more classes have been forced into these less desirable times. The only category of classrooms that is generally available throughout the day are those seating 24 or fewer students.

The heavy scheduling of classrooms makes it difficult for academic units to add more classes to the schedule, even though student demand for classes is at record high levels. The rules under which departments operate to schedule classrooms are seen as too restrictive by faculty and are very unpopular. However, they are necessary to ensure that all academic units have equitable access to classrooms. The heavy use of classrooms also leaves few rooms available during the day to schedule review sessions, seminars and other activities. Moreover, it has become very difficult for Physical Plant to schedule routine maintenance of classrooms because the rooms are busy so much of the time.

The only solution to the obvious shortage of classrooms is to construct new ones. The Task Force supports the construction of a new central classroom building that will add a significant number of new state-of-the-art classrooms to the campus inventory. Thought should be given to designing classrooms space that is flexible and that can be easily reconfigured for different purposes. For example, there could be a theater-in-the-round facility of 800-student capacity and tiered seats that could be subdivided into four pie-shaped 200-seat auditoriums, and several small classrooms that could be opened up to form larger rooms, in a manner similar to modern convention facilities.

**Table 4. Classroom Availability. Fall 2004.**

**MONDAY / WEDNESDAY / FRIDAY CLASSES**

	MWF 7:30-8:20	MWF 8:30-9:20	MWF 9:30-10:20	MWF 10:30-11:20	MWF 11:30-12:20	MWF 12:30-1:20	MWF 1:30-2:20	MWF 2:30-3:20	MWF 3:30-4:20
<b>Number of Seats</b>									
<b>1 - 24</b>	13	11	8	9	11	10	5	3	4
<b>25 - 49</b>	53	18	4	10	7	9	1	2	4
<b>50 - 75</b>	23	5	3	3	3	1	0	2	2
<b>76 - UP</b>	25	1	0	0	1	3	1	0	1
<b>Rooms Available</b>	114	35	15	22	22	23	7	7	11
<b>Rooms with Classes</b>	17	96	116	109	109	108	124	124	120
<b>Total Classrooms</b>	131	131	131	131	131	131	131	131	131

**Monday / Wednesday Classes**

	MW 1:30-2:45	MW 3:00-4:15
<b>Number of Seats</b>		
<b>1 - 24</b>	5	4
<b>25 - 49</b>	0	3
<b>50 - 75</b>	0	1
<b>76 - UP</b>	0	0
<b>Rooms Available</b>	5	8
<b>Rooms with Classes</b>	126	123
<b>Total Classrooms</b>	131	131

**Table 4 (continued). Classroom Availability. Fall 2004.****Tuesday / Thursday Classes**

	<b>TR 7:30-8:45</b>	<b>TR 9:00-10:15</b>	<b>TR 10:30-11:45</b>	<b>TR 12:00-1:15</b>	<b>TR 1:30-2:45</b>	<b>TR 3:00-4:15</b>
<b>Number of Seats</b>						
<b>1 - 24</b>	<b>13</b>	<b>6</b>	<b>5</b>	<b>7</b>	<b>6</b>	<b>3</b>
<b>25 - 49</b>	<b>46</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>3</b>
<b>50 - 75</b>	<b>20</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>76 - UP</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Rooms Available</b>	<b>103</b>	<b>7</b>	<b>5</b>	<b>9</b>	<b>9</b>	<b>9</b>
<b>Rooms with Classes</b>	<b>28</b>	<b>124</b>	<b>126</b>	<b>122</b>	<b>122</b>	<b>122</b>
<b>Total Classrooms</b>	<b>131</b>	<b>131</b>	<b>131</b>	<b>131</b>	<b>131</b>	<b>131</b>

**Evening Classes**

	<b>MW 4:30-5:45</b>	<b>TR 4:30-5:45</b>	<b>M 6:00-9:30</b>	<b>T 6:00-9:30</b>	<b>W 6:00-9:30</b>	<b>R 6:00-9:30</b>	<b>F 4:30-9:30</b>
<b>Number of Seats</b>							
<b>1 - 24</b>	<b>5</b>	<b>5</b>	<b>7</b>	<b>9</b>	<b>7</b>	<b>9</b>	<b>13</b>
<b>25 - 49</b>	<b>13</b>	<b>13</b>	<b>16</b>	<b>14</b>	<b>15</b>	<b>17</b>	<b>46</b>
<b>50 - 75</b>	<b>3</b>	<b>3</b>	<b>6</b>	<b>2</b>	<b>4</b>	<b>7</b>	<b>21</b>
<b>76 - UP</b>	<b>5</b>	<b>3</b>	<b>8</b>	<b>10</b>	<b>9</b>	<b>17</b>	<b>27</b>
<b>Rooms Available</b>	<b>26</b>	<b>24</b>	<b>37</b>	<b>35</b>	<b>35</b>	<b>50</b>	<b>107</b>
<b>Rooms with Classes</b>	<b>105</b>	<b>107</b>	<b>89</b>	<b>92</b>	<b>91</b>	<b>77</b>	<b>19</b>
<b>Rooms Not Scheduled Evenings</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>5</b>
<b>Total Classrooms</b>	<b>131</b>	<b>131</b>	<b>131</b>	<b>131</b>	<b>131</b>	<b>131</b>	<b>131</b>

**III. Seating**

The predominant form of seating in classrooms on the Norman campus is the moveable tablet-arm chair (Table 5). Over half (78) of the 131 rooms are so equipped. Twenty three classrooms have continuous counters (tabletops) with various types of fixed or moveable seating, whereas 24 have tables of various shapes (rectangular, round, trapezoidal) with moveable chairs. There are also 3 classrooms with auditorium-style seating and 3 with fixed tablet-arm-chairs.

The results of the faculty and student surveys show that tablet-arm chairs, the primary type of seating in Norman campus classrooms, are very unpopular. They are seen as being uncomfortable and too small for contemporary students' bodies and having desks that are too small to hold everything that students need to have with them in class. Most faculty and students prefer moveable tables and chairs, especially for small classes, because of the flexibility in configuring classrooms for different types of learning activities. However, the key issues for students are comfort, adequate desk surface area and visibility, as shown by

the selection of the two large lecture halls in Nielsen and the two large lecture halls in Adams as the most popular classrooms in the student survey. These rooms have tiered fixed seating, but the seats are padded and comfortable and they are attached to continuous table tops (counters) that provide each student with a large amount of surface area.

**Table 5. Classroom Seating by Type**

Type of Seating	Number of Rooms
Moveable Tablet-arm Chair	78
Fixed Tablet-arm Chair	3
Continuous Counter, Pivot Seat	16
Continuous Counter, Moveable Seats	4
Continuous Counter, Fixed Seat	3
Tables (rectangle) & Chairs	11
Tables (trapezoid) & Chairs	8
Seminar Table & Chairs	3
Tables (round) & Chairs	2
Theater Seat with Drop Tablet	3

#### IV. Seating Density

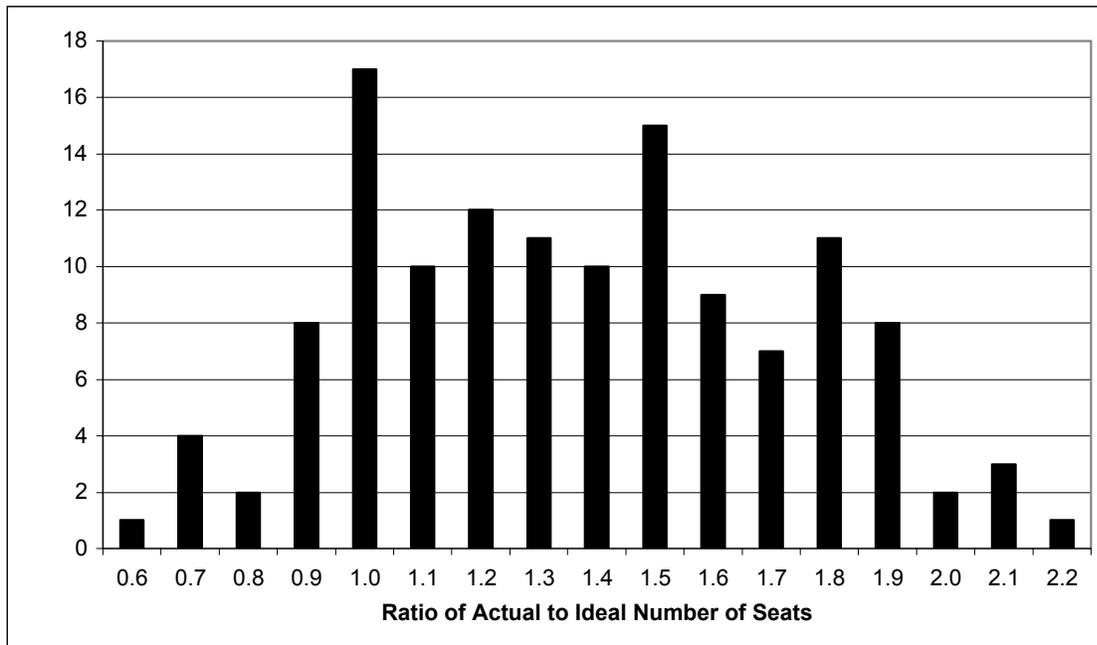
Faculty and students report that many classrooms are overcrowded. The rooms have too many chairs crowded into too small a space, leaving very little circulation space and no space for students to stow their backpacks and coats. The crowded conditions also make it difficult for students and faculty with physical disabilities to move between the rows of seats.

Because uses of rooms and types of seating vary, there is no absolute standard for seating density in a classroom. However, on the basis of standards at other institutions, the Task Force believes that approximately 1 seat per 20 square feet of room space provides an appropriate guideline for planning purposes. When this standard is applied to the 131 centrally classrooms (Table 6 and Chart 1) the results show that only 31 classrooms meet this standard. A total of 41 rooms (31% of the total) have a density of seating that exceeds this standard by between 1.6 and 2.2 times. Many of these classrooms are among those identified by students in the student survey as being overcrowded.

**Table 6. Seating Density: Ratio of the Actual Number of Seats in Classrooms to the Ideal Number of Seats (based on 1 seat per 20 sq. ft.)**

Ratio	0.6 - 1.0	1.1 - 1.5	1.6 - 2.0	2.1 - 2.2
Number of Rooms	32	58	37	4

**Chart 1. Seating Density: Distribution of Seating Ratios Among Classrooms**



**Table 7. Distribution of Seating Density Among Classroom Buildings**

Building	Ratio of Actual to Ideal Number of Seats			
	0.6 - 1.0	1.1 - 1.5	1.6 - 2.0	2.1 - 2.2
Adams	3	8	3	
Armory	3			
Bizzell	5	1		
Burton	4	2	1	
Carnegie		1		
Carpenter		1		
Carson	1	4	2	1
Copeland			2	
Dale		7	3	1
Dale Tower		3	1	
Felgar	1	3	2	
George Lynn Cross			3	
Gittinger			5	2
Gould		3		
Hester	2			
Jacobson	1			
Kaufman		2	11	
Nielsen	1	2		
Physical Sciences	5	18	1	
Sarkeys	6	3	2	
Sutton			1	
<b>TOTALS</b>	32	58	37	4

As shown in Table 7, the largest numbers of overcrowded rooms (those exceeding the 1 seat per 20 sq. ft. standard by 1.6 times or more) are found in Kaufman (11), Gittinger (7) and Dale (4). Adams, Carson, George Lynn Cross each have 3, while 6 other buildings have one or two.

Of the 41 classrooms that have a seating density that is greater than 1.5 times the ideal density, 34 are furnished with moveable tablet-arm chairs and 4 are furnished with moveable tables and chairs. (The other 3 have theatre-style seating with drop-tablets on the arms.) The density of seating in these rooms could easily be reduced by removing chairs. However, even if the density were reduced to only 1.5 times the ideal number, the consequence would be an immediate loss of 308 seats, a 14% reduction in the number of seats in these rooms. This would potentially reduce the number of students who could enroll in the classes scheduled in these rooms, a good thing for the students who were able to enroll in the classes, but not necessarily for those excluded. Clearly, the desirable goal of reducing seating density would need to be accompanied by a compensating increase in the number of classrooms of adequate size to support current levels of enrollment.

## **V. Accessibility**

Students and faculty with disabilities, especially those with mobility impairments, face special problems with regards to classroom access and use.

### **A. Accessibility to Classrooms.**

The accessibility of classrooms by persons with mobility impairments, especially those in wheel chairs, is an important consideration. Only 27 of the 131 centrally scheduled classrooms are considered to fully meet all guidelines for accessibility. Additionally, 77 more classrooms could be considered to fully meet all guidelines for accessibility by changing the door hardware from knobs to levers. The remaining 24 classrooms do not meet all guidelines for multiple reasons.

A related issue is the distance that persons with movement-related disabilities must travel from a handicap-accessible entrance to get to the classroom. As a minimum, students need to be provided with maps showing the shortest route to take to get to classrooms.

### **B. Seating and Desks.**

A more difficult problem to fix than changing door knobs is providing appropriate seating and desk space for students with movement-related disabilities. Only 24 classrooms currently allow full access to persons in wheel chairs. In 17 classrooms, students in wheel chairs have access only to a limited number of rows, usually either in the front or back of the room. Limiting disabled students to the back of the room is a poor choice for students with multiple disabilities. In 71 classrooms there are no spaces set aside for students in wheel chairs. The problem is further compounded by the fact that many of these rooms are so full of tablet-arm chairs that it is impossible for a student or faculty member in a wheel chair, with a walker or on crutches to maneuver between the rows.

### **C. Restrooms.**

Classroom renovation will sometimes need to involve spaces that are not technically classrooms. The absence of wheelchair accessible restrooms in two frequently used buildings - George Lynn Cross and Gould - is the most urgent accessibility issue. Having access to restrooms is a strong priority for students and faculty with disabilities, especially because of the legitimate fear of having an unexpected accident in a building without appropriate facilities. Not only does Gould Hall have no accessible restrooms, it also does not have any accessible drinking fountains.

**D. Adaptive technologies.**

Modern technology can provide assistance to students with various types of disabilities. For instance, classrooms could be equipped with a wireless microphone system that would allow persons who are hearing impaired to get amplification through their hearing aids. Another example would be outfitting classrooms with computers set on adjustable tables (especially important for wheel chair users) and utilizing super sensitive “mice” (for those with very limited hand usage). Stations in laboratories and work tables can also be adjusted to a lower height for students in wheel chairs. Some of these changes have been already made in laboratories on the 3<sup>rd</sup> floor of George Lynn Cross.

**E. Sign Language.**

With regard to the needs of hearing impaired persons, all centrally scheduled classrooms could have the capacity to present sign language services from a remote location. The tougher issue is finding qualified interpreters. The additional of 1 FTE interpreter in the 04-05 will help alleviate this situation somewhat. Providing a wireless microphone system to which the hearing impaired can tune is a currently available solution. But their use on campus is inextricably linked to other issues about upgrading classroom technology.

**F. Elevators.**

Another access-related issue is the absence of elevators in academic buildings. The Armory, Carpenter Hall, the Fine Arts Center, Science Hall and Sutton Hall all house classrooms and faculty offices, but do not have elevators. Hester and Robertson Halls have elevators that are not code-compliant. The absence of adequate elevators, prevents or severely limits access to these buildings by students, faculty and staff with mobility impairments.

**VI. THE CONDITION OF NORMAN CAMPUS CLASSROOMS**

The results of the Task Force’s own visits to classrooms and the results of the faculty and student surveys paint a very negative picture of the state of classrooms on the Norman campus. The general findings are that:

- Classrooms, in general, are dirty and poorly maintained.
- Classrooms are overcrowded, with too many desks crammed into too little space, creating uncomfortable conditions and limiting both mobility and access by disabled persons.
- The seats in most classrooms are uncomfortable and do not provide enough desk surface area to hold everything that students need in class.
- The instructional technology in classrooms is inadequate, too complicated to use and poorly maintained.
- Classrooms are often too hot or too cold.
- Visibility of the instructor and presentations are often limited.
- It is not possible to control the levels of lighting adequately for different instructional purposes.

OU’s primary classroom facilities are showing their age. The largest in terms of rooms, Physical Sciences Center, and largest in terms of capacity, Dale Hall, are nearing 40 years of age. The third largest, in terms of rooms, Kaufman, is even older. For a large number of students, the large lecture halls in Physical Sciences and Dale provide the first significant academic impression they get of OU. Two courses, ZOO 1114 and PSY 1113, held in Hall 200, OU’s largest classroom, generate more than two percent of the

credit hours generated annually on the Norman campus. Unfortunately, this and the other large classrooms have severe limitations, including having the highest seating densities of any classrooms on campus. It would benefit both faculty and students to bring these large lecture rooms and the other older classrooms up to modern standards. Although the Task Force strongly supports the construction of a new classroom building, given the lag time before such a building can be completed, the Task Force believes that the first priority should be to begin renovating the existing classrooms to bring them up to an adequate standard of comfort and usability.

## VII. FACULTY AND STUDENT NEEDS AND EXPECTATIONS

The needs and expectations of the faculty and students of the Norman campus are discussed in detail in the next two sections, which provide the results of separate surveys of the faculty and students, conducted on-line during the Fall of 2003. What follows is a brief summary and comparison of the results from these two groups.

In general, faculty and students agree on what they want their classrooms to be like, but they differ in relative priorities (Table 8). Faculty prioritize technology needs over needs related to seating and room configuration, whereas students give precedence to seating and room configuration over technology. This is hardly surprising, since the students are usually the ones sitting in the seats and trying to see the instructor. However, the needs expressed in both categories are similar.

With regards to technology, faculty and students alike want to be able to make and see computer-based presentations, especially PowerPoint presentations, and videos, using both DVD and VCR technology. This

**Table 8. Comparison of the prioritized needs of faculty and students.**

Top Faculty Needs	Top Student Needs
1. Instructional technology	1. Seating and room configuration
2. Internet Access	2. Instructional technology
3. Custodial service sand maintenance	3. Whiteboards and blackboards
4. Seating and room configuration	4. Maintenance
5. Ability to control levels of lighting	5. Internet Connectivity
6. Ability to control temperature	6. Ability to control temperature
7. Electrical outlets	7. Sound amplification
8. Maintenance of technology	8. Ability to control levels of lighting
9. On-call trouble shooting	9. Reduction of outside noise

requires rooms to be equipped with: digital projectors; easy to use computer connections or in-class computers; DVD and VCR players; projection screens that can be seen by everyone in the class; and an amplified sound system.

With regards to seating, students and faculty agree that seating should be more comfortable and provide enough desk surface area to hold a laptop computer, a notebook and a textbook. Both groups also prefer tables and chairs to tablet-arm chairs and moveable seating to fixed seating. However, for students, the primary consideration is the ability to see what is going on at the front of the classroom, including the instructor and material presented on writing boards or projected on screens. There is widespread desire to be able to see and use writing boards and projection screens at the same time, as opposed to having to raise and lower projection screens to be able to see the boards. This explains the popularity among

students of the large lecture rooms in Nielsen and Adams Hall. All have fixed seating, but the seats are in tiers, providing good visibility, and have continuous counters (table tops) that provide each students with large surface area for their belongings. They also have a lot of board space that is not covered up by the projection screens, allowing the instructor to project images and write on the board as needed during class.

Students also place more emphasis on the quality of the writing boards in classrooms. Interestingly, students prefer whiteboards over blackboards, whereas it is the other way around for the faculty. They agree however on the main problem, which is that many blackboards and whiteboards are illegible because of poor quality, age or inadequate frequency of cleaning.

Internet access is another high priority shared by faculty and students. Both groups want high speed internet access available in every classroom, and most prefer that the connection be wireless. Wireless connections are particularly important to students, who want to use lap top computers in classrooms where wired connections are not practical.

Cleaning and maintenance are top priorities for both for faculty and students. Both groups have the impression that classrooms are not being cleaned on a regular basis and that the furniture and equipment in the classrooms are not being regularly maintained.

Faculty and students also want the ability to adjust the level of lighting according to the needs of the presentation. Having to choose between all the lights being either fully on or off, as is the case in most classrooms, is not consistent with the instructional needs of either faculty or students.

The ability to control room temperatures is also a priority shared by faculty and students. Both groups report that classrooms are often so cold or so hot that teaching and learning are affected. They want to be able to adjust the temperature in the room to a comfortable level.

Two needs that make the top list of the faculty but not the students are the need for more electrical outlets and on-call troubleshooting. The former is primarily related to the needs of students to be able to plug lap top computers into electrical outlets during class. This is also a priority, although a lower one, for students. On-call troubleshooting is a top priority for faculty, who want to be able to get help quickly when things go wrong, especially with technology, at the start of a class. Faculty need to have the means to call for help from the classroom and to receive a rapid response to resolve the problem and minimize the effects on the class session.

Students also have two top priorities not shared by the faculty. These are the related needs for sound amplification and noise control, which affect the ability of students to hear what is going in class. Sound amplification may be needed in larger rooms, when the instructor has a soft voice, or when projected presentations have sound associated with them. Unfortunately, few classrooms currently provide for amplification of sound. Noise infiltration from outside of the classroom compounds the inability of students to hear. Students want better insulation of classrooms to keep hallway noise from being heard in the classrooms and adjustments in the air handling system to reduce noise from air ducts. They would also like personnel from Physical Plant and grounds keeping to take class schedules into account when planning the use of power equipment outside of classrooms with windows.

**SECTION 5.****FACULTY SURVEY RESULTS**

**Sarkeys M204.** This classroom has 59 fixed, padded chairs in tiers and continuous table tops (counters). The room is equipped for send-receive video teleconferencing (for distance education) with two cameras, 3 TV monitors (for seeing distant sites) and touch-to-talk microphones. It also has an in-room computer, VCR and DVD players, a ceiling-mounted digital projector and a pull-down projection screen that blocks half of the whiteboard.

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## I. SUMMARY

The faculty survey was made available on-line to approximately 1400 Norman campus faculty members, during a two week period, beginning October 29, 2003. A copy of the survey is included in section X. A total of 352 Norman campus faculty members responded to the survey (see section X).

### A. PRIORITIZED NEEDS

In this survey, faculty were asked to prioritize up to six needs in each of four categories:

- Equipment
- Physical
- Support
- Environment and maintenance.

These data are summarized in priority order in Tables 1 and 2.

**Table 1** lists the fourteen needs that were cited by faculty as a priority 80 or more times. These constitute the primary needs of the faculty for supporting their instructional mission.

**Table 1. Top 14 Prioritized Needs**

Blackboards & Whiteboards	169
Internet connectivity	163
In-class computer	153
Overhead projector	142
Moveable tables and chairs	115
Video projector	110
Light dimmers	104
Maintenance of technology	103
On-call trouble shooting	103
VCR	101
DVD	99
Temperature control	97
Electrical outlets	89
Custodial Services	82

**Table 2** lists all of the remaining prioritized needs that were cited at least 10 or more times. Complete lists of all of the items cited as priorities are provided in the body of the report.

**Table 2. Additional Prioritized Needs**

Sound Dampening	64	Plasma Screens	21
Document Camera (Elmo)	61	Replacing Batteries	20
Lecterns	60	Painting	20
Training in use of Equipment	59	Tablet-arm Chairs	19
Lighting	59	Physical Plant Services	18
Ventilation	57	Power Point Capability	17
Blackout Drapes	38	In-Class Voting Receiver	16
Wireless Microphones	36	TVs/Big Screens	16
Windows	29	Door Closure	15
Trash Cans	28	Odor Control	14
New Carpet	27	Map Hooks	13
Slide Projectors	26	Projection Screens	13
Wheel Chair Access	25	PA System	12
Pencil Sharpeners	24	Larger Classrooms	12

## B. NEEDS CITED IN THE OPEN-ENDED COMMENTS

Faculty were also invited to list their needs through open-ended comments in the same four sections as the priorities as well as:

- needs for specific classrooms
- other needs
- general comments
- the question, “If you could change one thing about the classrooms in which you teach, what would it be?”

The responses, grouped by categories, are listed in **Table 3**. The open-ended comments revealed a broad spectrum of concerns, many of which recapitulate the top prioritized needs. Other needs emerged from these comments that were not addressed in the section on priorities. The complete list of all open-ended comments is available on-line at: <http://casweb.ou.edu/crtf/faculty.pdf>

**Table 3. Number of Open-Ended Comments by Category**

Instructional Technology	161	Blackboards/Whiteboards	36
Appearance and Maintenance	125	In-class Computer	22
Room Configuration and Seating	104	Chains and Cords	19
Quantity and Size of Classrooms	71	Computer and Electrical Connections	15
Lighting	49	Health and Safety	13
Acoustics and Noise Control	42	Handicap Accessibility	9
Temperature Control	36	Windows and Ventilation	8

## C. THE NEEDS OF THE FACULTY

### 1. Instructional Technology.

Six of the top fourteen prioritized needs and the most frequently cited need in the open-ended comments are one form or another of instructional technology. A consistent message that emerges from the survey is that faculty want a basic suite of instructional technology in their classrooms.

First and foremost, they want decent **writing boards**. Although faculty express a slight preference for blackboards over whiteboards, the principle desire is for good quality boards that can be easily seen and read by all of the students in the class and that can be erased cleanly. Cheap boards that become increasingly illegible with use are not acceptable. They also want the boards positioned so that they can use them simultaneously with projected images. They do not like projector screens that cover the boards, forcing them to raise and lower the screen and turnoff projectors in order to use the boards. Instructors should be able to move fluidly from board to screen and back to the board as the instructional needs dictate.

After boards, faculty want to be able to make projected computer presentations, primarily using PowerPoint. For this they need one or more **digital projectors** (depending on the size of the classroom) and a **computer** on which to run the software. As shown by the open-ended comments, faculty are split on their preference for in-class computers versus lap tops. Many faculty express a desire for the computer to be installed permanently in the classroom so that they can just turn it on and use it. Others would like to bring their own lap tops to class, but then they need to be able to connect to the room's projection and sound systems easily and quickly, preferably in no more than five minutes.

An equally large number of faculty express the need for **overhead transparency projectors**, OU's current default classroom technology. Faculty like the ease of use, reliability and high resolution that overhead projectors provide, but they want good quality projectors and a supply of replacement bulbs in the classroom. Many express unhappiness about the **chains** that limit the mobility of the projectors in the room and create a tripping hazard. A smaller but significant number of faculty would prefer to have **document cameras** either as an alternative or as a supplement to transparency projectors.

The final instructional technology need is the ability to show video material in both **VCR and DVD** format. Clearly both formats are needed. Moreover, instead of TV monitors to view videos, many faculty would prefer projection technology because of the ability to make the presentations more visible to the students in the classroom.

## 2. Internet Access

The second highest priority of faculty overall is **Internet connectivity**. Internet access and wireless access were also cited as priorities under the equipment category. Faculty believe that every classroom on the Norman campus should provide at least the instructor and preferably the students with access to the Internet during class. This would allow faculty and students to access material on-line during class and to share material with one-another. Wireless connectivity is the means most often cited for accomplishing this goal.

## 3. Custodial Services and Maintenance

The second most cited need among the open-ended comments and the last of the top fourteen prioritized needs is for improved **custodial services and classroom maintenance**. The survey reveals the widespread perception on the part of the faculty that the classrooms on the Norman campus are dirty, smelly, shabby rubbish-filled and poorly maintained spaces that do not provide a positive environment for teaching and learning. Dirty blackboards and whiteboards, dirty floors and desktops, overflowing trash cans, trash on the floors, broken furniture and broken equipment create a visible clutter in many classrooms that detracts from the learning environment. The reduction in classroom cleaning and the elimination of the regular

classroom maintenance, both driven by budget cuts, have created a situation that faculty find to be intolerable and that sends a negative message to students about the importance of learning at the university.

#### 4. Classroom Seating and Configuration

The next highest prioritized need and the third most frequent category of comments involve classroom seating and configuration. First and foremost is the clear preference for *moveable tables and chairs*. This is the type of seating preferred by most faculty for smaller classes because it provides flexibility in rearranging the seating into different configurations to accommodate different pedagogical techniques and goals. In large lecture halls, the preference shifts to *fixed tables*. Tables are preferred because they provide more desk surface area to hold the various items students need in class. Very few faculty prefer tablet-arm chairs, which are seen as being uncomfortable to sit in, too small for contemporary bodies and having too little surface area to hold the items students need to bring to class. The survey results support a *new standard for classroom seating*, consisting of:

- a table with enough surface area to hold a laptop computer, a notebook and a text book at the same time; and
- a comfortable padded seat large enough to accommodate an “adult” body.

#### 5. Ability to Control the Level of Lighting

The most cited environmental need after seating is the *ability to control the level of lighting* in the classroom. As faculty switch from one presentation mode to another they need to be able to raise and lower the level of lighting to maximize the ability of students to see what is being presented. Too many classrooms have lights that are either all on or all off, creating a teaching-learning environment that is very difficult to manage. A related need that emerged from the open-ended comments was to improve the quality of lighting in classrooms. many of which were described as having harsh or inadequate levels of lighting.

#### 6. Temperature Control

Another frequently cited environmental need is the *ability to control the temperature of the classroom*. Many faculty members complain of classrooms that are either too cold (the more common complaint) or too hot. In either case it creates a condition in which people are physically uncomfortable and less able to learn.

#### 7. Electrical Outlets

The fourth frequently cited environmental need is for more *electrical outlets* in classrooms. This need is driven by the desire of faculty that students be able to use lap top computers during class. Thus, students need to be able to plug their computers into electrical outlets. This is a need not currently met in most existing classrooms at OU and one that would require significant retrofitting of both the classrooms and the electrical systems of buildings.

#### 8. Maintenance of Technology

As more and more faculty use technology as part of their teaching, it is perhaps not surprising that *maintenance of technology* is a priority. This means first and foremost maintenance of the technology that is installed in classrooms. Many faculty complain about technology that is broken or difficult to use and would like a program by which the classroom technology is regularly evaluated, maintained and replaced.

## 9. On-call Troubleshooting

Of equal importance as a support need is *on-call troubleshooting*. When a faculty member is about to begin class and things do not work, they want to be able to get help right away so as not to delay the start of class any longer than necessary. They would like to be able to call a single number and get help in the classroom to fix the problem as soon as possible.

## 10. Other Needs

In addition to the needs listed above, several additional needs emerged as being of importance to smaller numbers of faculty. These include:

**Acoustics and Noise Control.** Many faculty report that the rooms in which they teach are plagued by extraneous noise that makes it hard for both students and them to hear and be heard. The primary source of this noise is either from the hallway outside the room or from adjacent classrooms. Other sources of noise include the air handling equipment, which can be very loud in some rooms, and the outdoors where noise from lawn mowing and leaf blowing can be a major distraction.

**Chains and Cords.** Some faculty report dissatisfaction with the chains that attach many transparency projectors to the floors and walls of many classrooms. Not only are these chains considered to be unsightly, they are tripping hazards and may overly restrict the movement and positioning of the projector in the room. A related concern are electrical and computer cords that cross aisles and can be tripping hazards.

**Health and Safety.** A small number of faculty are concerned about health and safety hazards. Among the problems cited were mold growing in classrooms and restrooms and improperly stored chemicals in laboratories.

**Handicap Accessibility.** A remarkably small number of faculty expressed concerns about the accessibility to classrooms by students with disabilities, especially those in wheel chairs. The most often cited reason for the problem was overcrowding of classrooms with too many chairs, leaving inadequate space in which to maneuver a wheel chair.

**Windows and Ventilation.** The final concern, mentioned by only a handful of faculty, was a desire to have classrooms with windows, both to let in outdoor light and to be able to open to provide ventilation.

## D. THE PREFERENCES OF THE FACULTY FOR CONFIGURING CLASSROOMS

Faculty were also asked to give their preferences for configuring the classrooms in which they teach. A total of 239 responses were received, with the following general conclusions.

### 1. Flexibility.

Faculty prefer different configurations for different sizes and types of rooms. Moveable furniture and flat floors are overwhelmingly preferred for smaller classrooms, whereas tiered seating with fixed tables are preferred for large lecture rooms.

### 2. Movable versus fixed seating.

Moveable seating is preferred to fixed by a 4-1 margin, although many responders stated a preference for fixed tables for large lecture halls.

### 3. Tiered versus flat seating.

A slight majority of faculty who stated a preference preferred tiered seating in classrooms, although most faculty who said they preferred moveable furniture did not specifically state a preference for flat floors, even though this option is implied. Of those stating a preference, tiered rooms were preferred for large classes, especially in combination with fixed tables. However, some faculty also prefer tiered rooms with fixed tables for smaller classes as well and a few like tiered rooms with tablet-arm chairs.

### 4. Tables and chairs versus tablet-arm chairs.

Tables and chairs are preferred to tablet-arm chairs by a more than 3-1 margin, and most of these faculty want chairs that can be individually moved. A minority prefer fixed tables, usually in combination with tiered rooms, with either moveable chairs or fixed chairs.

### 5. Raised platforms

Among those stating a preference raised platforms were preferred by more than ten times as many people as no platform, especially in large classrooms. They enhance the visibility of the instructor but still allow him or her to circulate easily among the students. Raised platforms are preferred to stages, because stages create a physical separation between the teacher and the students and imply to some faculty the expectation that they be performers.

### 6. Other Preferences

Small numbers of faculty expressed additional preferences or concerns, including:

- **Conference tables with moveable chairs** for seminar classes.
- **Student comfort**, especially for large students.
- **Laptop support**, in particular the need for adequate desk space and electrical connections to allow students to use laptop computers.
- **More left-handed desks on tablet-arm chairs**
- **Positioning of visual aids**, including boards and screens to maximize their visibility and use during class.

## E. THE WORST BUILDINGS

Although relatively few faculty availed themselves of the opportunity to single out classrooms needing specific attention. Forty six different classrooms in eight different buildings were cited as having specific needs. The buildings were Dale, Cattlett, Physical Sciences Center, Gittinger, Adams, George Lynn Cross, Burton, and Kaufman. The only rooms with multiple citations were Dale Hall 122, with three citations, and Catlett 115 and Kaufman 234, with 2 citations each. Dale Hall was the building with the largest number of rooms cited – fifteen. Catlett was second with 8 classrooms cited.

A wide variety of needs were cited with most of the comments being about poor maintenance and custodial services. Overcrowding, sound problems and temperature problems are also mentioned.

Gittinger is singled out as being particularly “filthy” with lighting, sound and temperature control problems.

**II. SURVEY INSTRUMENT**

**A. FACULTY SURVEY FORM**

All members of the instructional faculty during the Fall 2004 semester were invited by email to participate in this survey. The following form was made available as a hyperlink included in the email. By clicking on the link, faculty members were presented with an electronic version of the form, which they could complete and submit on-line. The responses were collected in a Microsoft Access database for later analysis.

**Classroom Needs Survey**  
Classroom Renovation Taskforce

<b>Department:</b> <input type="text"/>	<b>Academic Rank:</b> <input type="text" value="Please Select"/>
---	--

The purpose of this survey is to identify the general and specific needs of the members of the OU faculty to guide planning and future resource allocation. In the first four sections list in decreasing order of importance up to six priorities for equipment; physical; support; and environment and maintenance needs. Examples are provided but feel free to list needs not included. Space is also provided for comments. The remaining sections are for open ended responses for other needs and comments.

<b>Equipment Needs</b>	
Examples: Blackboards, document camera(Elmo), DVD players, in-class computer, in-class voting receivers, map hooks, overhead projectors, PA system, plasma screens, slide projectors, tape recorders, vcr's, video projectors, whiteboards, wireless microphones	
Priority:	Comments:
1 <input type="text"/>	<input type="text"/>
2 <input type="text"/>	
3 <input type="text"/>	
4 <input type="text"/>	
5 <input type="text"/>	
6 <input type="text"/>	

**Physical Needs**

Examples: Chair rails, base boards, blackout drapes, door closure, electrical outlets, lecterns, light dimmers, locks, movable tables and chairs, numbered seats, pencil sharpeners, tablet-arm chairs, trash cans, wheel chair access, windows

Priority:

1	<input type="text"/>
2	<input type="text"/>
3	<input type="text"/>
4	<input type="text"/>
5	<input type="text"/>
6	<input type="text"/>

Comments:

<input type="text"/>
----------------------

**Support Needs**

Examples: Internet connectivity(wired or wireless), maintenance of technology, on call troubleshooting, replacing batteries, training in use of equipment

Priority:

1	<input type="text"/>
2	<input type="text"/>
3	<input type="text"/>
4	<input type="text"/>
5	<input type="text"/>
6	<input type="text"/>

Comments:

<input type="text"/>
----------------------

**Environmental Needs and Maintenance**

Examples: Custodial services, lighting, new carpet, odor control, painting, Physical Plant services, sound dampening, temperature control, tile, ventilation

Priority:

1

2

3

4

5

6

Comments:



**Needs for Specific Classrooms**

Identify specific needs that you have for specific rooms. Please give room numbers.



**What are your preferences for configuring the room(s) in which you teach?** (fixed vs. movable seating; table and chairs vs. tablet-arm chairs; tiered seating vs. flat seating; raised platform vs. stage)

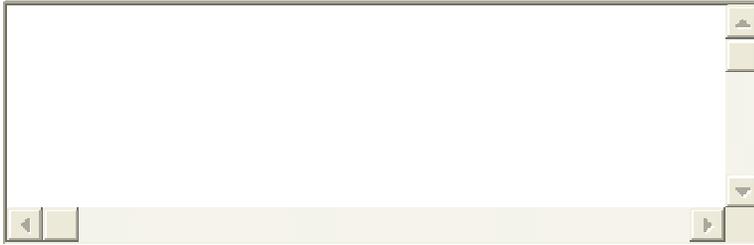


**If you could change one thing about the classroom(s) in which you teach, what would it be?**



**Other Needs**

List other needs not identified elsewhere in this survey.

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**Comments**

Are there any other issues or needs for classrooms that you would like to bring to the attention of the task force?

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**B. LIST OF PARTICIPANTS (352 TOTAL RESPONSES)****1. Faculty Participants Sorted Alphabetically By Unit**

Unknown	8	History	15
Accounting	2	History of Science	4
Aerospace and Mechanical Engineering	3	Honors College	2
African and African American Studies	2	Human Relations	13
Anthropology	17	Health and Sports Science	5
Architecture	2	ILAC	6
Art	5	Industrial Engineering	4
Art History	2	Interior Design	1
Botany/Microbiology	7	Library and Information Science	3
CAS Dean's Office	3	Marketing and Supply Chain Management	7
CEES	13	Mathematics	8
Chemistry/Biochemistry	8	Meteorology	4
Classics and Letters	3	Management of Information Systems	6
COA Model Shop	1	Modern Languages, Literatures, and Linguistics	19
College of Business	1	Music	14
College of Law	2	Oklahoma Biological Survey/Zoology	1
Communication	6	Petroleum and Geological Engineering	2
Computer Science	7	Philosophy	6
Computer Survey	1	Physics and Astronomy	3
Construction Science	3	Political Science	13
Drama	4	Psychology	9
ECE	7	RCPL	2
Economics	2	Religious Studies	3
Education Leadership and Policy Studies	6	Social Work	2
Education Psychology	4	International and Area Studies	1
Engineering	1	Social Work	2
English	19	Sociology	11
Film and Video Studies	10	Spanish	1
Finance	2	Women's Studies	1
Gaylord College of Journalism and Mass Communication	7	Zoology	22
Geography	3		
Geophysics	1		

**2. Faculty Participants Sorted Numerically By Unit**

Zoology	22	Meteorology	4
English	19	Aerospace and Mechanical Engineering	3
Modern Languages, Literatures, and Linguistics	19	CAS Dean's Office	3
Anthropology	17	Classics and Letters	3
History	15	Construction Science	3
Music	14	Geography	3
CEES	13	Library and Information Science	3
Human Relations	13	Physics and Astronomy	3
Political Science	13	Religious Studies	3
Sociology	11	Accounting	2
Film and Video Studies	10	African and African American Studies	2
Psychology	9	Architecture	2
Unknown	8	Art History	2
Chemistry/Biochemistry	8	College of Law	2
Mathematics	8	Economics	2
Botany/Microbiology	7	Finance	2
Computer Science	7	Honors College	2
ECE	7	Petroleum and Geological Engineering	2
Gaylord College of Journalism and Mass Communication	7	RCPL	2
Marketing and Supply Chain Management	7	Social Work	2
Communication	6	Social Work	2
Education Leadership and Policy Studies	6	COA Model Shop	1
ILAC	6	College of Business	1
Management of Information Systems	6	Computer Survey	1
Philosophy	6	Engineering	1
Art	5	Geophysics	1
Health and Sports Science	5	Interior Design	1
Drama	4	Oklahoma Biological Survey/Zoology	1
Education Psychology	4	International and Area Studies	1
History of Science	4	Spanish	1
Industrial Engineering	4	Women's Studies	1

**III. EQUIPMENT NEEDS****A. SUMMARY OF PRIORITIZED NEEDS (1130 RESPONSES)****1. Equipment Needs: Pre-selected Categories**

	PRIORITY						TOTAL
	1	2	3	4	5	6	
In-Class Computer	50	42	32	13	4	12	153
Overhead Projector	40	47	29	15	6	5	142
Video Projectors	48	26	17	15	3	1	110
VCRs	7	26	34	27	7	0	101
DVD Players	25	26	22	16	9	1	99
Blackboards	48	21	9	6	3	2	89
Whiteboards	27	15	19	6	10	3	80
Document Camera (Elmo)	12	14	11	17	5	2	61
Wireless Microphones	4	5	9	7	9	2	36
Slide Projectors	7	8	3	2	3	3	26
Plasma Screens	2	7	5	4	1	2	21
In-Class Voting Receiver	2	5	4	2	0	3	16
Map Hooks	4	3	2	2	2	0	13
PA System	0	3	1	5	2	1	12
Tape Recorders	1	1	3	1	2	2	10

**2. Equipment Needs: Top Write-in Categories**

	TOTAL
Internet Access	21
Power Point Capability	17
TVs/Big Screens	16
Projection Screens	13
Wireless Access	11
Smart board	8
Smart Boards	4

**3. Other Equipment Needs Cited (Number of Citations in Parenthesis)**

Additional A/V inputs for Projectors (2)	Apple Computer (1)
Better Air Conditioning (2)	Better Lighting (1)
Camera Hookup Access (2)	Cable Connections for CNN (1)
Class Piano Labs (2)	CD player (1)
Darkenable Room/Dimmers (2)	CD-Writer (1)
Display Easels (2)	Chairs (1)
Microscope (2)	Chalk (1)
Screen for Double Slide Projectors (2)	Comfortable Seats for Students (1)
Stereo Speakers (2)	Convertible Classroom (1)
VCR/DVD Recorder/Player (2)	DHT 0906 not suitable (1)
Work Stations in CCRS (2)	Free Chairs (1)
Access to Blackboard (1)	Glow in the Dark Controls (1)

Good Erasers (1)  
HITT (1)  
Image Projection System (1)  
Improved Classrooms (1)  
Individual Instrumental Seats (1)  
Joint Models (1)  
Lab Computers (Research) (1)  
Large Desks (1)  
Lectern with small light and room for teaching  
(1)  
Modular Scenery Blocks (1)  
More Comfortable Chairs (1)  
More Multimedia Training (1)  
Moveable Desks (1)  
Movie Screen (1)  
Multimedia Projectors (1)  
New Video Equipment (1)  
Operable Video Equipment (1)  
Organ Models (1)

Piano (1)  
Political Map of the World (1)  
Printer (1)  
Projection Room (1)  
Remote (User Friendly) (1)  
Size and Layout of Classrooms (1)  
Skulls (1)  
Smart System for Lectures (1)  
Software (1)  
Spectrophotometers (1)  
Staff that can fix Technology Equipment (1)  
Stereo System (1)  
Telephone (1)  
Turn Table (1)  
Video Cameras (1)  
Video Conferencing Equipment (1)  
Voice Conferencing System (1)  
Wireless Computer Mice (1)

**B. SUMMARY OF OPEN-ENDED COMMENTS****Number of Comments by Category**

<b><u>CATEGORY</u></b>	<b><u>NUMBER</u></b>
In-class Computer	17
Power Point Related	17
LCD projector	16
DVD	16
Blackboards	14
Configuration of Equipment/Room	10
Whiteboards	9
Projection Screens	9
Maintenance and Technical Support	7
Chains on Overhead Projectors	7
Facilities for Film and Video Classes	7
Integration of Equipment	6
Slide projectors	6
Document camera	4
Overhead projector	4
Sound System	4
VCR	4
Microphones	3
Network connections	3
Televisions	3
Pianos	2
Stereo system	2
Miscellaneous	32

**C. GENERAL CONCLUSIONS**

**Digital Projection Technology.** The primary group of equipment needs expressed by faculty are those in support of the ability to project instructional technology in the classroom and especially the ability to display PowerPoint presentations. The suite of equipment needed includes an in-class computer, a video projector, and both DVD and VCR players.

**Computers.** The faculty are split on their preference for laptops versus in-class computers. In-class computers are more convenient, being already connected to the projector and network. The growing use of ultra-small disk drives (“thumb drives”) makes it easy to bring large amounts of data to class in a small package. However, there are concerns about maintenance, reliability and the compatibility of software versions. If faculty must bring their own laptops to class, each faculty member would need to own or have access to a lap top computer and they would need to be able to hook it up in class within the 10 minutes allotted between classes.

**Blackboards and Whiteboards** The major secondary equipment need cited by faculty is for adequate blackboards and whiteboards, with the former being preferred slightly more than the latter. Issues mentioned include:

- **The number and placement of the boards in the room.** There needs to be enough board space, the boards need to be visible throughout the room and they should not be covered by projector screens. Faculty prefer that blackboards and projection screens should be placed on separate walls

or positioned so as to be useable at the same time. Faculty do not like projection screens that cover the boards, which forces them either to choose one or the other mode of display or raise and lower the screen and turn projectors on and off during class.

- **Poor quality.** The poor quality and/or age of the boards in many classrooms makes them very difficult to read.
- **Lack of cleaning.** The lack of regular maintenance and cleaning is also a contributing factor to the general perception that many boards are illegible. .

**Transparency Projectors.** Transparency (overhead) projectors are also widely used by faculty and need to be present in classrooms, but the bulky chains on the overhead projectors are generally despised.

**Document Cameras.** Many faculty would like to have document cameras as an alternative or supplement to traditional transparency projectors.

**DVD.** Upgrading to DVD playback is highly desired.

**Small Classrooms.** While many of the large classrooms have multimedia support, faculty wish for more instructional technology in the small to medium classrooms.

**Consistent Interface.** Some faculty requested to have a consistent interface/method for working with the equipment, in general, and hooking up laptop computers, in particular. It is seen as a problem when different rooms vary as much as they do at OU in terms of how the equipment is set up and controlled.

**Other.** Other frequently requested items of equipment include wireless microphones, slide projectors, plasma screens, in-class voting receivers and map hooks.

**IV. PHYSICAL NEEDS****A. SUMMARY OF PRIORITIZED NEEDS (676 RESPONSES)****1. Physical Needs: Pre-selected Categories**

	PRIORITY						TOTAL
	1	2	3	4	5	6	
Moveable Tables and Chairs	60	34	10	7	3	1	115
Light Dimmers	30	34	21	9	5	5	104
Electrical Outlets	29	24	22	11	0	3	89
Lecterns	33	13	8	2	4	0	60
Blackout Drapes	13	7	6	7	3	2	38
Windows	11	9	4	3	2	0	29
Trash Cans	1	3	6	6	5	7	28
Wheel Chair Access	4	11	7	1	1	1	25
Pencil Sharpeners	5	6	5	6	1	1	24
Tablet-arm Chairs	10	5	2	0	2	0	19
Door Closure	3	8	2	2	0	0	15
Numbered Seats	3	3	0	0	0	0	6
Chair Rails	3	0	0	0	0	2	5
Base Boards	0	0	0	0	2	0	2
Locks	0	0	1	0	0	0	1

**2. Physical Needs : Top Write-in Categories**

	TOTAL
Larger Classrooms	12
Internet Access	10
Large Desks	9
Heat/Cooling Control	7

**3. Other Physical Needs Cited (Number of Citations in Parenthesis)**

Long Tables (3)	Auditorium Seating (1)
Table for Instructor (3)	Benches for Hallways (1)
Carpeting (2)	Blackboards (1)
Chairs (2)	Cadaver Table Repair (1)
Chalk (2)	Chairs that can rotate (1)
Screen (2)	Class Layout (1)
Small Light on Lectern (2)	Clean Overhead Projectors (1)
Small Light on Teacher Stand (2)	Clock Visible to Students (1)
Storage Cabinets/Shelves (2)	Decorations (1)
Table for Instructor (2)	Desks (1)
Window Shades (2)	Desks for Laptops (1)
Wireless Internet (2)	Door Kickstands (1)
“Drafting” Type Chair on Wheels (1)	Electric Generator to Power Building (1)
A/V Upgrade for Grad. Seminar Room (1)	Erasers (1)
Additional Screens on Side of Room (1)	Extension Cords (1)
Airflow (1)	Five Gallon Buckets with lids (1)

Fixed Seating (1)	Posting Surface (1)
Group Work Flexibility (1)	Recycling Containers (1)
Handicap Seating (1)	Remodeling (1)
Lab Cabinets (1)	Remote Control (1)
Lab Classrooms (1)	Repair of Damaged Chairs (1)
Lap Boards for Choir Room (1)	Round Tables (1)
Large Projection Screens (1)	Seminar Rooms (1)
Left Handed Desks (1)	Stapler (1)
Lights (1)	Storage (1)
Microscopes (1)	Sufficient Power (1)
More Classroom (1)	Tiered Seating (1)
More Lights above the Blackboard (1)	Unchained Tables (1)
New Classroom Buildings (1)	Video Camera for Student to ask Questions (1)
Paint Walls of Classrooms (1)	Wall Space to Display Work for Discussion (1)
Piano Bench (1)	Whiteboard (1)
Pianos (1)	Window Blinds (1)

## B. SUMMARY OF OPEN-ENDED COMMENTS

### Number of Comments by Category

<u>CATEGORY</u>	<u>NUMBER</u>
Room Configuration/Furniture	46
Light Control	17
Computer Connections/Electrical Outlets	12
Overcrowding	11
Handicap Accessible	9
Windows / Ventilation	8
Maintenance	6
Chains and Cords	6
Specific Needs	6
Pencil sharpener	4
Acoustics	3
Platforms	3
Quality of Lighting	2
Temperature Control	1
Safety	1
Miscellaneous	20

## C. GENERAL CONCLUSIONS

**Classroom Furniture.** Overall the greatest physical need cited by the faculty was improvement in the configuration and furnishing of classrooms. Faculty want desks that provide more surface area to hold students' belongings, including lap top computers, and are more comfortable for students to sit in. Specific needs include:

- **Moveable Tables and Chairs.** This is the single most cited need by faculty, who like the combination of large surface area that tables provide and flexibility of configuration that tables and chairs offer. Other faculty like the surface area provided by tables but want them fixed in

place with either fixed or moveable chairs. Although very few faculty express a preference for tablet-arm chairs, faculty do believe that this type of seating should be more comfortable and provide more desk area than those currently in use at OU.

- **Reduced Overcrowding.** Overcrowding of classrooms is also a major concern of faculty. There are too many desks crammed into classrooms, leaving no room to move around. Overcrowding is exacerbated by the added clutter of broken furniture and equipment.

**Control of Lighting.** The ability to control the level of lighting was the second most cited concern. Faculty are frustrated by not being able to dim lights, as opposed to turning them off completely, when making computer or other projected presentations. Faculty want lights that can be dimmed over a wide range of settings and/or drapes or blinds that can keep out outside light.

**Computer Connections and Electrical Outlets.** The third most cited need is for more computer connections and more electrical outlets in classrooms for computers. This need is critical to support students' use of laptop computers in classrooms.

**Wheel chair access.** Lack of wheel chair access was also cited as a major problem. Overcrowding contributes to this problem.

**Cleanliness and Maintenance.** Faculty find that classrooms are dirty and not well maintained. They cite uncollected trash, broken doors and broken furniture as problems.

**Ventilation.** Faculty want well ventilated classrooms. They also like windows, especially ones that can be opened to let in fresh air.

**Other.** Other needs include better maintenance, the removal of tripping hazards caused by chains and cords, pencil sharpeners, better acoustics and lighting and raised platforms.

## V. SUPPORT NEEDS

### A. SUMMARY OF PRIORITIZED NEEDS (487 RESPONSES)

#### 1. Support Needs: Pre-selected Categories

	PRIORITIES						TOTAL
	1	2	3	4	5	6	
Internet Connectivity	119	26	11	6	1	0	163
Maintenance of Technology	36	46	15	4	2	0	103
On Call Troubleshooting	29	41	28	4	0	1	103
Training in use of Equipment	9	16	19	15	0	0	59
Replacing Batteries	2	4	7	3	4	0	20

#### 2. Other Support Needs Cited (Number of Citations in Parenthesis)

Stock of Projector Bulbs (6)	Keys to Equipment Storage (1)
Campus Phone in Room (3)	Keys to Special Rooms (1)
Cleanliness (2)	Less Sensitive Equipment (1)
Computers (2)	On-site Technology for Broadcast Class (1)
De-cluttering (2)	Personnel (1)
Equipment Checklist (2)	Printed Instructions in Place (1)
Overhead Projector Bulbs (2)	Projector (1)
Reliable Technology (2)	Software Availability (1)
All A/V Equipment Maintenance (1)	Software/Hardware Support (1)
Campus Phones (1)	Support of A&S Labs during Classes (1)
Dept. Server and Support (1)	Test Each Room Every Other Week (1)
Electric Outlets (1)	Update Projection Equipment (1)
Janitorial (1)	Video Conferencing Capability (1)

### B. SUMMARY OF OPEN-ENDED COMMENTS

#### Number of Comments by Category

<u>CATEGORY</u>	<u>NUMBER</u>
General Support	21
On Call help	18
Equipment Support	12
Other	9
Training	9
Internet connectivity	7
Wireless connectivity	5

### C. GENERAL CONCLUSIONS

**Internet Connectivity.** The number one support need cited by faculty is internet connectivity. Every classroom should provide the instructor with access to the internet. Many also cite the need for students to

have access. Many would prefer to have **wireless connectivity**.

**Maintenance of Technology.** Maintenance of Technology is the second most cited need. Repair of equipment, including desks, and replacement of expendables (e.g., light bulbs) are key concerns, along with quality of projection and configuration of computers.

**On Call Troubleshooting.** The third most cited need and the most frequent specific need mentioned in the comments is the need for timely help with problems that crop up during class. There is lots of frustration when things don't work. Faculty would like to have someone on call 7:30 am to 11:00 p.m. to fix problems on very short notice to avoid class disruption. Faculty cite the need to know whom to call and how to contact someone for help.

**General Support.** The largest number of comments relate to need for general support and the lack of overall resources. There were many specific positive comments about Denese Miles, who is seen as a model for faculty support, but a feeling she is understaffed. The biggest specific problem in this category is replacing burned out light bulbs and batteries

**Training.** Training is seen as a problem. Most users are not satisfied with what is available. Some faculty cite a need for posted directions on how to use equipment.

**VI. ENVIRONMENTAL AND MAINTENANCE NEEDS**

**A. SUMMARY OF PRIORITIZED NEEDS (496 RESPONSES)**

**1. Environmental Needs and Maintenance: Pre-selected Categories**

	PRIORITIES						TOTAL
	1	2	3	4	5	6	
Temperature Control	50	30	12	4	0	1	97
Custodial Services	43	16	13	6	2	2	82
Sound Dampening	25	16	11	7	4	1	64
Lighting	24	18	9	5	2	1	59
Ventilation	14	16	18	2	5	2	57
New Carpet	7	12	3	0	5	0	27
Painting	6	7	4	2	0	1	20
Physical Plant Services	4	1	4	7	0	2	18
Odor Control	3	5	2	2	1	1	14
Tile	0	3	0	0	2	0	5

**2. Environmental Needs and Maintenance: Top Write-in Categories**

Mold Control	6
Chalk	4
Removal of Anything Broken	4

**3. Other Environmental and Maintenance Needs Cited (Number of Citations in Parenthesis)**

- |                                      |                                    |
|--------------------------------------|------------------------------------|
| Anything to help Acoustics (2)       | General Appearance (1)             |
| Repair of Broken Seating (2)         | Hole in Window, CH314 (1)          |
| Security (2)                         | Keep Chalk and Erasers in Room (1) |
| Windows (2)                          | Light Dimmer (1)                   |
| Windows that can open (2)            | Location of Classroom (1)          |
| Acoustics (1)                        | Mini-blinds for windows (1)        |
| Appropriate Seating for Lectures (1) | More Classrooms (1)                |
| Asbestos (1)                         | New Flooring (1)                   |
| Better Drain System for Sinks (1)    | Non-Fluorescent Lighting (1)       |
| Blackboards (1)                      | Recycling Bins for Newspaper (1)   |
| Carpet Cleaned (1)                   | Removal of Chalk Dust (1)          |
| Classroom Seating (1)                | Repair of Blackout Drapes (1)      |
| Cleaner Rooms (1)                    | Space (1)                          |
| Comfortable (1)                      | Sun/Shade Control (1)              |
| Drapes (1)                           | Urine at the Back Steps (1)        |
| Environmental Health Reassurance (1) | Window Shades/Covering (1)         |
| Full Length Dorr Mirrors (1)         |                                    |

**B. SUMMARY OF OPEN-ENDED COMMENTS****Number of Comments by Category**

<b><u>CATEGORY</u></b>	<b><u>NUMBER</u></b>
Custodial Services	38
Temperature Control	28
Noise Control	17
Maintenance	15
General Problems	13
Health Hazards	12
Paint and New Carpet	12
Things are OK	9
Seating	7
Lighting	6

**C. GENERAL CONCLUSIONS**

**Temperature Control.** The ability to control classroom temperature was the most frequently cited need in this category and the subject of 28 comments. More classrooms were cited as being too cold than too hot, but, in general, the inability of faculty to make the temperature of the rooms in which they teach comfortable is a major problem that significantly degrades the quality of the learning environment.

**Custodial Services.** Custodial services was the second most cited environmental need and the subject of 38 comments. In general, classrooms are seen by faculty as needing improved custodial services. Faculty report that classrooms (as well as offices, restrooms, etc.) are dirty, smelly and/or trash-filled with sticky desktops and floors. They also cite chalk dust, dirty chalkboards, and dirty erasers as problems. Lack of chalk, dry erase markers, and erasers, were also mentioned. One smelly restroom was mentioned as badly needing cleaning and odor was mentioned by two faculty. Although four faculty commented that custodial service was adequate to wonderful, many more mentioned the cutback in custodial services as being a problem.

**Sound Dampening.** Sound dampening was the third most cited environmental problem and the subject of 17 comments. Extraneous sound is a major distraction in many classrooms. The sources include hallways outside the room, adjacent classrooms, the air handling system and from the outdoors. Carpenter Hall has particular problems; however, Gittinger, Burton, Kaufman, Dale, Rhyne, PHSC and the Armory were also cited as being too noisy. Faculty would like better insulation to prevent sound infiltration and adjustments to the air handlers to reduce classroom noise.

**Lighting.** Classroom lighting was the next most cited need. The six comments indicate that the problems include inability to control the level of lighting, an inadequate amount of lighting and a dislike of fluorescent lighting.

**Ventilation.** Poor ventilation is seen as a problem in some buildings, leading to problems of odor and potential health hazards.

**Maintenance.** Comments about maintenance covered a variety of problems, including broken chairs, cracked plaster, poorly maintained lighting, plumbing problems, poorly maintained teaching equipment, inadequate security for AV equipment, etc. Faculty describe many classrooms as looking shabby and neglected.

**Health Hazards.** Mold problems were specifically mentioned by six faculty. Five complained about poor air quality and lack of good ventilation, while one mentioned odor in bathrooms. General health hazards were mentioned in 4 comments

**Seating.** Better chairs/seating, too many seats crammed into a classroom, and seating that becomes disorganized during the day or week were complaints noted on the faculty survey. One comment noted broken chairs.

**Paint and New Carpet.** Four comments concerned the need to paint classrooms and offices. Five comments concerned the need to replace carpet, with one request to remove all carpet as it was a problem for those who have chronic allergies. New floors and drapes were requested.

**General Problems.** This category was a catch-all for comments that did not fit under the more specific categories. Mentioned was the need for more classrooms, better IT equipment in classrooms, and more attractive faculty offices since teaching often takes place in faculty offices. One faculty complained about tripping over the heavy chains that anchor the overhead projectors.

**Things are OK.** At least a few faculty are satisfied with the classrooms in which they teach. Nine faculty commented positively on the environment in the classrooms.

## VII. NEEDS FOR SPECIFIC CLASSROOMS

### A. SUMMARY OF OPEN-ENDED COMMENTS

#### Number of Rooms Cited by Building

<u>CATEGORY</u>	<u>NUMBER</u>
Dale Hall	15
Cattlett	8
Physical Sciences Center	6
Gittinger	5
Adams	4
George Lynn Cross	4
Burton	2
Kaufman	2

### B. GENERAL CONCLUSIONS

Forty six different classrooms in eight different buildings were cited as having specific needs. The only rooms with multiple citations were Dale Hall 122, with three citations and Dale Hall 122, Catlett 115 and Kaufman 234 with 2 citations each. Dale Hall had the largest number of rooms cited – fifteen - but this may be an artifact of the large number of classrooms in that building. Catlett was second with 8 classrooms cited.

A wide variety of needs were cited for the 46 rooms, reflecting the needs cited elsewhere in the survey. Most of the comments are about poor maintenance and custodial services. Some request specific items of equipment. Overcrowding, sound problems and temperature problems are also mentioned. Gittinger is singled out as being particularly “filthy” with lighting, sound and temperature control problems.

**VIII. PREFERENCES FOR CONFIGURING CLASSROOMS****A. SUMMARY OF OPEN-ENDED COMMENTS****Number of Comments by Category**

<b><u>CATEGORY</u></b>	<b><u>NUMBER</u></b>
<b>SEATING (304)</b>	
Prefer movable seating	138
Prefer fixed seating	39
Prefer tables and chairs	91
Prefer fixed tables with movable chairs (5)	
Prefer fixed tables with fixed chairs (3)	
Prefer circular tables (3)	
Prefer seminar tables (5)	
Prefer tablet-arm chairs	23
Seating that accommodates laptop computers	7
Prefer stackable chairs	3
<b>ROOM CONFIGURATION (102)</b>	
Prefer tiered rooms	44
Prefer flat rooms	35
Prefer raised platforms	22
Want wheelchair accessible	1
<b>MISCELLANEOUS (18)</b>	
Want comfortable seating for students	10
Want less crowded classrooms	5
Want quieter rooms	3
<b>ACCOUTREMENTS (10)</b>	
Adequate and visible A/V equipment	5
Prefers lecterns	2
Prefer tile floor	2
Prefer carpet	2
Prefer light control	2
Prefer windows	2
<b>ARRANGEMENTS (5)</b>	
Prefer U shaped arrangements	1
Prefer Non-U shaped arrangements	1
Prefer arrangements that don't look like auditoriums	1
Want larger computer labs classroom	1
Screen in middle with adequate side blackboard space	1

## B. GENERAL CONCLUSIONS

**Diversity of Configurations to meet a Diversity of Needs.** The first thing that emerges from the 239 comments submitted in this survey of preferences for configuring rooms is that faculty prefer different configurations for different sizes and types of rooms. Moveable furniture and flat floors are overwhelmingly preferred for smaller classroom, whereas tiered seating with fixed tables are preferred for large lecture rooms. Several respondents specifically mentioned the need for a variety of configurations to be available to meet the need of a diverse set of classes.

**Preferences.** This having been said, the survey revealed a diverse set of preferences:

- **Movable versus fixed seating.** Moveable seating is preferred to fixed by a 4-1 margin (138 comments versus 39), although many responders stated a preference for both, depending on class size.
- **Tiered versus flat seating.** Forty-four respondents stated a preference for tiered classrooms, whereas 35 stated a preference for flat floors. However, most faculty who said they preferred moveable furniture did not specifically state a preference for flat floors, although this option is implied. There is a reasonable agreement that moveable furniture and flat floors are preferable for classes involving small group discussions. Of those preferring tiered rooms, most cited the preference for this type of configuration for large classes, especially in combination with fixed tables. However, some faculty also prefer tiered rooms with fixed tables for smaller classes as well and a few like tiered rooms with tablet-arm chairs.
- **Tables and chairs versus tablet-arm chairs.** Tables and chairs are preferred to tablet-arm chairs by a more than 3-1 margin (86 versus 23). Of those preferring tables and chairs, 71 preferred tables and chairs that can be individually moved, whereas 6 stated a preference for fixed tables, usually in combination with tiered rooms. An additional 5 faculty stated a preference for fixed tables with moveable chairs whereas 3 stated a preference for fixed tables with fixed chairs.
- **Raised platforms.** Among those stating a preference one way or the other, raised platforms were preferred by more than ten times as many people as no platform. Raised platforms were seen to be more necessary in large classrooms. Raised platforms are preferred to stages, because stages create a physical separation between the teacher and the students and imply to some faculty the expectation that they be performers. Raised platforms enhance the visibility of the instructor but still allow him or her to circulate easily among the students.
- **Seminar configuration.** Five faculty specifically cited a preference for conference tables with moveable chairs as the preferred configuration for seminar classes.

### Other Observations:

- **Student comfort.** Ten faculty specifically mentioned student comfort. Within this group several mentioned the needs of large students specifically.
- **Laptop support.** Seven faculty specifically mentioned the need for adequate desk space and connections to allow students to use laptop computers.
- **Left-handed desks.** Two faculty who liked tablet-arm chairs mentioned the need for more left handed versions.

- **Audio-visual aids.** Five faculty mentioned the need for adequate A/V equipment and the positioning of boards and screens to maximize their visibility and use during class.

## IX. IF YOU COULD CHANGE ONE THING ABOUT THE CLASSROOM(S) IN WHICH YOU TEACH, WHAT WOULD IT BE?

### A. SUMMARY OF OPEN-ENDED COMMENTS

#### Number of Comments by Category

<u>CATEGORY</u>	<u>NUMBER</u>
Seating	25
Lighting/Windows	24
Projector Systems	24
Overcrowding	20
In-class computers	15
Blackboards/Whiteboards	13
Availability of consistent, dependable and friendly technology	12
Appearance and Maintenance	12
Acoustics and Sound Control	11
Room Layout	11
Cleanliness	10
Better Temperature Control	7
Remove the chains on the projectors	6
Teaching in same building as office	4
Seminar rooms	2
DVD capacity	2
Miscellaneous	27

### B. GENERAL CONCLUSIONS

**Seating.** Classroom seating was the most common thing that faculty would change (25 comments) if they could. This included replacing existing seating with chairs that are more comfortable and spacious, changing from tablet-arm chairs to tables and chairs, adding tiered seating, having moveable seating, and having more seminar style seating with round tables. Comments also included reducing the number seats in rooms that are overcrowded.

**Lighting.** Twenty-four comments were received regarding changes in lighting, including desires for more natural lighting and more windows, better quality of lighting and better control over lighting, especially the ability to turn off or dim the lights and darken rooms.

**Projector systems.** Twenty-four faculty also identified projector systems as the one thing they would change. The needs mentioned include digital projectors for computer-based and multimedia presentations, larger projection screens mounted higher on the wall to enhance visibility and adding multiple projectors to allow simultaneous projection of more than one presentation.

**Overcrowding.** Twenty-two faculty identified overcrowding as the thing they would change. To accomplish this they would either reduce the number of seats and students currently placed into classrooms or increase the sizes of classrooms, which implies new construction or renovation.

**In-class computers.** Fifteen faculty would add in-class computers as an alternative to bringing their own, thereby reducing set-up time before class. They also want the computers to be networked.

**Blackboards and whiteboards** were mentioned 13 times, including the desire for more blackboard space on more than one wall, real slate blackboard, bigger blackboards that can be raised, and replacing blackboards with whiteboards. Of particular importance was the positioning of screens and blackboards so that they were visible to students and could be used at the same time.

**Availability of consistent, dependable and friendly technology.** Twelve faculty would make sure that classrooms are adequately equipped with technology and that the technology be reliable, user friendly and consistent from room to room.

**Appearance and Maintenance.** Another 12 faculty would put primary emphasis on making classrooms look nice and keeping them well maintained.

**Acoustics and Sound Control** were identified by 11 faculty as being the most important change. These comments included the need to prevent sound from infiltrating into the room from the outside, including adjacent classrooms, and room acoustics and amplification to improve the ability of students to hear the instructor.

**Room Layout.** Eleven faculty identified room layout as the thing they would most like to change. Although there were about as many suggestions on how to do this as there were responders, one theme was the importance of classroom not being too deep, making students too far away from the instructor.

**Cleanliness.** Ten faculty would improve the cleanliness of the classrooms in which they teach, which they see as being dirty and generally neglected.

**Other.** Other things that faculty would change if they could include:

- Better control of the temperature in their classrooms (7)
- Removing the chains on overhead projectors (6)
- Being able to teach in the same building as their office (4)
- Having more seminar rooms (2)
- Having DVD capability (2)
- Miscellaneous changes (27)

**X. OTHER NEEDS****A. SUMMARY OF OPEN-ENDED COMMENTS****Number of Comments by Category**

<b><u>CATEGORY</u></b>	<b><u>NUMBER</u></b>
Space	18
Instructional Technology / Audiovisual	13
Physical / Room Maintenance	9
Noise	4
Classroom Scheduling	3
Furniture	2
Esthetics	2
Miscellaneous	12

***B. GENERAL CONCLUSIONS***

**Quantity and Size of Classrooms.** The primary need in the “Other” category is for both a larger number of classrooms available for scheduling and larger rooms relative to the number of students placed in them. Faculty clearly experience the lack of classroom availability and the fact that too many classrooms are overcrowded, creating a poor learning environment.

**Instructional Technology / Audiovisual.** The 13 comments in this category are a recapitulation of the technology needs cited over and over again elsewhere in this survey. They include the need for digital projectors, internet connections, DVD and VCR playback and an easy to use interface that allows instructors to be up and running in the short period of time available before class. Some would also like to see consistency of technology, controls and computer connections in classrooms across campus.

**Maintenance and Noise** are also a continuation of recurring themes. In general faculty want clean, well maintained classrooms that are quiet enough for teachers and students to hear one another.

**Classroom Scheduling.** Three faculty cite the processes by which classrooms are assigned before classes begin and relocated after classes begin as being problems that need to be addressed.

**Furniture** in this category refers to office and department furniture, which is described as being inadequate and embarrassing.

Esthetics **includes the desire for more attention to be paid to appearance and for art work on the walls.**

## XI. GENERAL COMMENTS

### A. SUMMARY OF OPEN-ENDED COMMENTS

#### Number of Comments by Category

<u>CATEGORY</u>	<u>NUMBER</u>
Quantity and Size of Classrooms	22
AV/IT Equipment	18
Cleanliness and Maintenance	14
Comments on the Survey	13
Configuration and Furniture	7
Program- and Room-Specific	5
Classroom Environment	4
Staff Support	4
Safety	2
Access for the Disabled	2
Miscellaneous	7
Non-classroom-related Comments	3

### B. GENERAL CONCLUSIONS

**Quantity and Size of Classrooms.** As in the “Other” category, the largest number of comments (22) in the “General Comments” category had to do with the inadequate number of class rooms available on the Norman campus and the small size or overcrowding of the existing rooms.

**Audio visual and Instructional Technology Equipment.** The need for various types of AV/IT equipment was the second most frequent general comment (18), reflecting the general disconnect between what faculty feel they need to be able to teach well and the failure of most classrooms to meet those needs.

**Cleanliness and Maintenance.** The faculty’s unhappiness with the dirtiness, shabbiness and poor level of maintenance that characterize many classrooms are recapitulated in these 14 comments.

**Comments on the Survey.** A few faculty (13) took this opportunity to thank the Task Force for doing this survey and expressed the hope that something positive would come from it.

**Configuration and Furniture** was the subject of 7 general comments, repeating the calls for better and more comfortable student seating and room configurations that support teaching and learning.

**Program- and Room-Specific.** Three buildings (Rhyne, Gould and Physical Sciences) were singled out as being particularly in need of improvements whereas the Law School was praised. One comment called for classrooms specifically designed for Film and Video Studies.

**Classroom Environment.** Poor sound, temperature control and lighting control were the subject of 4 comments.

**Staff Support.** Four faculty commented on the need for technical support, including two who gave kudos to IT support staff.

**Safety.** Potential safety hazards in laboratories were raised by two faculty.

**Access for the Disabled.** Two faculty commented on the need for improved access to classrooms by students who are disabled.

## SECTION 6

## STUDENT SURVEY RESULTS



**Adams 355.** This room contains 48 padded moveable chairs at moveable trapezoidal tables that can be reconfigured into rows, squares and rectangles. The room has a ceiling-mounted digital projector, that projects on the white side wall of the room and an in-room computer

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## I. SUMMARY

The student survey was made available on-line to approximately 24,500 Norman campus students during a two week period, beginning November 25, 2003. A copy of the survey is included in Appendix A. A total of 626 students responded to the survey (Appendix B).

### A. PRIORITIZED NEEDS

In this survey, students were asked to prioritize up to six needs in each of four categories:

- Equipment
- Physical
- Support
- Environment and maintenance.

**Table 1** lists the needs that were cited as a priority 10 or more times, organized into categories and **Table 2** lists these same needs, ungrouped.

**Table 1. List of Prioritized Needs Grouped by Categories**

Seating and Room Configuration	1246	Electrical Outlets	94
Instructional Technology	770	Windows	79
Whiteboards and Blackboards	352	Ventilation	57
Maintenance	309	Disabled Student Services	51
Internet Connectivity	309	Replacing Batteries	48
Temperature Control	243	Carpet	43
Cleanliness	242	In-Class Voting Receiver	35
Sound Amplification	277	Tape Recorders	20
Lighting	237	Door Closure	19
Reduction of Outside Noise	181	Map Hooks	17
Pencil Sharpeners	131	Tile	14
Clocks	119	Computer Lab	10
Access for Students with Disabilities	92	Electrical Outlets	10
On Call Troubleshooting	92	Numbered Seats	10

**Table 2. List of Prioritized Needs**

More Comfortable Seating	286	Furniture Maintenance	110
Internet Connectivity	253	DVD Players	108
Temperature Control	243	Backpack Storage	107
Larger Tablet on Chairs	237	Maintenance of Technology	105
Space between Seats	182	Reduction of Outside Noise	181
Whiteboards	174	Erasing Blackboards	98
In-Class Computer	157	Movable Tables and Chairs	94
Video Projectors	155	Access for Students with Disabilities	92
Wireless Microphones	143	Light Dimmers	92
Amplified Sound System	134	On Call Troubleshooting	92
Larger Chairs	128	Classroom Lighting	91
Overhead Projectors	123	Electrical Outlets	94
Pencil Sharpeners	131	View of Presentation	88
Cleaning Classrooms	119	Blackboards	80
Clocks	119	Windows	79

Plasma Screens	70	Document Camera (Elmo)	34
Trash Cans	70	Tablet-arm Chairs	34
VCRs	64	Left-Handed Desks	24
Ventilation	57	Tape Recorders	20
Blackout Drapes	54	Wireless Internet	19
Odor Control	53	Door Closure	19
Disabled Student Services	51	TV	18
Slide Projectors	50	Map Hooks	17
Replacing Batteries	48	Tile	14
Room Maintenance	48	Fewer Seats	11
Painting	46	Lecterns	11
Larger Desks	44	Computer Lab	10
Carpet	43	Electrical Outlets	10
Internet Access	37	Numbered Seats	10
In-Class Voting Receiver	35		

## B. NEEDS CITED IN THE OPEN-ENDED COMMENTS

Students were also invited to make open-ended comments in the same four sections as the priorities as well as asked to respond to three open-ended prompts involving:

- other needs
- general comments
- the question, “If you could change one thing about the classrooms in which you take classes, what would it be?”

The responses, grouped by categories, are listed in **Table 3**. The complete list of all open-ended comments is available on the Internet at: <http://casweb.ou.edu/crtf/student.pdf>

**Table 3 Summary of Open-ended Comments Grouped by Categories**

Seating	342	Lighting	23
Maintenance and Cleanliness	234	Clocks	20
Temperature control	113	Health Hazards	16
Configuration and Size of Rooms	109	Number and size of classrooms	13
Instructional Technology	96	On Call help	13
Internet and Wireless connectivity	64	Classroom Environment	12
Blackboards	63	Transparency Projectors	12
Noise Control	48	Pencil Sharpeners	10
Microphones and Sound Systems	30		

## C. STUDENTS' EXPECTATIONS FOR CLASSROOMS

The 626 students who responded to this survey are remarkably consistent in their expectations for what their classrooms should be like and in their views as to how well OU's existing classrooms meet these expectations.

Students' expectations and needs fall into two broad categories – comfort and instructional, with the former being more important than the latter. Overcrowded classrooms with uncomfortable seating and

poor climate control create an environment that is not conducive to learning. Poor room layout and inadequate instructional technology just make a bad situation worse. Students want uncrowded, comfortable classrooms in which they can easily see and hear the instructor and see any written or projected material and that are equipped with a basic suite of electronic instructional aids.

On the basis of the survey, an ideal classroom from the students' perspective would have the following characteristics:

- Comfortable seating, preferably padded.
- Desk surface area large enough to hold a notebook, a text book and a laptop computer at the same time.
- Unrestricted visibility of the instructor and the various boards and projection screens from any seat in the room.
- Enough space between seats to give students adequate "elbow room" and enough circulation space to allow easy movement between rows of chairs.
- Good acoustics and a good quality amplified sound system for larger rooms.
- The absence of extraneous noise from outside the classroom or from the air handling system.
- A good selection of basic instructional technology options, including: whiteboards or high quality blackboards; video projectors and projection screens that are sufficiently large to be seen clearly from any seat in the room; VCR and DVD players; and easy hook-ups for an instructor's portable computer or an in-class computer.
- Electrical outlets for students' lap top computers and internet connections, preferably wireless.
- Good lighting, including windows for daylight, and the ability to control the level of lighting on a continuum.
- The ability to control the temperature in the room.
- A clock with accurate time that is visible to the students and instructor.
- Clean and orderly with everything in good repair and in working order.
- Accessibility by students and instructors with disabilities.

Students express varied opinions about the details of room configuration. In general, for large lecture halls, they express a preference for fixed, tiered seating, with long, continuous "desks," such as those found in Nielsen 102 or Adams 150. Tiered seating is preferred because it greatly improves visibility in a large room. The long desks, whether with fixed seats or moveable chairs, provide enough surface area to hold all of the items students need for class. They also work equally well for left- and right-handed students. For smaller classrooms, many students prefer a flat floor and desks and chairs that can be reconfigured for different types of classes. However, some students also prefer tiered seating with fixed desks, such as those in Adams Hall, for smaller classes as well. The main concerns are that there be good visibility, adequate circulation space and comfortable seats with adequate desk surface.

#### **D. HOW OU MEASURES UP**

The results of the survey make clear that students have a low opinion of OU's current classrooms. In general, they complain that too many of OU's classrooms exhibit many, if not all, of the following negative characteristics:

- Uncomfortable, tablet-arm chairs with desks too small to hold all the items needed for class.
- Poor visibility of the instructor, screen and boards.
- Poor temperature control.
- Overcrowded with too many desks crammed into rooms too small to hold them, leaving no room to move between rows of desks and no space to stow coats and backpacks.

- Inadequate access for students and instructors with disabilities, due at least in part to being overcrowded with furniture.
- Blackboards and whiteboards that are uncleanable and unreadable.
- Dirty and poorly maintained, with broken furniture and equipment.
- Inadequate instructional technology, typically consisting of: an overhead projector chained to the floor with a heavy, dangerous chain; a screen that is too small to be seen by students in the back of the room; and a TV and VCR located in one corner of the room.
- Unpleasant fluorescent lighting that is either all on or all off.
- Poor acoustics and too much extraneous noise.
- Ugly.

#### **E. PREFERENCES FOR INSTRUCTIONAL TECHNOLOGY**

The survey identified several needs and preferences for classroom instructional technology:

- The foremost need is the ability to show PowerPoint and other computer-generated presentations. This requires rooms to be equipped with: one or more overhead projectors; one or more screens large enough and positioned in such a way as to be visible from every seat; an easy to use connection for a laptop computer; dimmable lights; and an adequate sound system.
- Students also want DVD players generally available in classrooms, in addition to VCR's.
- Whiteboards are preferred over blackboards, but the key need is for boards that can be seen and read by every student in the class.
- For classes requiring laptops, students want individual electrical outlets and internet connections, preferably wireless.
- Finally, amplified sound is essential for large rooms.

#### **F. ENVIRONMENTAL ISSUES**

The survey results point to a serious problem regarding the quality of the environment in many of OU's classrooms.

- Students report that many classrooms are not being cleaned on a regular basis, leaving them dirty and cluttered.
- Bad odor is also a problem in several rooms and buildings, possibly related to inadequate cleaning of restrooms.
- Students also report that broken furniture is not being repaired, contributing to classroom clutter, and that equipment is not being maintained, making it hard for teachers to teach and students to learn.

However the major environmental concerns are temperature and lighting.

- The temperature in many classrooms is either too cold or too hot and can not be adjusted, making the classrooms uncomfortable learning environments.
- The quality of lighting and the fact that it is not possible to control the level of lighting in many classrooms is a major source of complaint. Instructors are forced to turn off all of the lights to use projectors making it hard for students to take notes or even stay awake.

## II. SURVEY INSTRUMENT

### A. STUDENT SURVEY FORM

Every student enrolled through the university’s Norman campus, totaling approximately 22,500, was invited by email to participate in this survey. The following form was made available, for two weeks beginning November 25, 2003, as a hyperlink included in the email. By clicking on the link, students were presented with an electronic version of the form, which they could complete and submit on-line. The responses were collected in a Microsoft Access data base for later analysis.

#### Student Classroom Needs Survey Classroom Renovation Taskforce

<b>Major:</b> <input type="text"/>	<b>Academic Status:</b> <input type="text" value="Please Choose"/>
------------------------------------	--

The purpose of this survey is to identify the general and specific classroom needs of OU students to guide planning and future resource allocation. In the first four sections list in decreasing order of importance up to six priorities for equipment, physical, environment and maintenance, and support. Examples are provided but feel free to list needs not included. Space is also provided for comments. The remaining sections are for open ended responses for other needs and comments. **(Note: Use the TAB key or mouse and not the Enter key to move between the text boxes.)**

<b>Equipment Needs</b>	
Examples: Amplified sound system, blackboards, clocks, document camera (Elmo), DVD players, in-class computers, in-class voting receivers, map hooks, overhead projectors, plasma screens, slide projectors, tape recorders, vcr's, video projectors, whiteboards, wireless microphones	
Priority:	Comments:
1 <input type="text"/>	<input type="text"/>
2 <input type="text"/>	
3 <input type="text"/>	
4 <input type="text"/>	
5 <input type="text"/>	
6 <input type="text"/>	

<b>Physical Needs</b>
Examples: Access for students with disabilities, blackout drapes, door closures, electrical outlets, larger tablet on chairs, larger chairs, lecterns, light dimmers, locks, more comfortable seating, movable tables and chairs, numbered seats, pencil sharpeners, tablet-arm chairs, trash cans, wheel chair access, windows

<b>Priority:</b>	<b>Comments:</b>
1 <input type="text"/>	<input type="text"/>
2 <input type="text"/>	
3 <input type="text"/>	
4 <input type="text"/>	
5 <input type="text"/>	
6 <input type="text"/>	

**Environmental Needs and Maintenance**

Examples: Classroom lighting, cleaning classrooms, carpet, odor control, erasing blackboards, painting, furniture maintenance, reduction of outside noise levels, reduction of classroom noise levels, room maintenance, space between seats, space to store backpacks, sound dampening, temperature control, tile, ventilation, view of presentation

<b>Priority:</b>	<b>Comments:</b>
1 <input type="text"/>	<input type="text"/>
2 <input type="text"/>	
3 <input type="text"/>	
4 <input type="text"/>	
5 <input type="text"/>	
6 <input type="text"/>	

**Support Needs**

Examples: Disabled student services, Internet connectivity (wired or wireless), maintenance of technology, on-call troubleshooting, replacing batteries

<b>Priority:</b>	<b>Comments:</b>
1 <input type="text"/>	<input type="text"/>
2 <input type="text"/>	
3 <input type="text"/>	
4 <input type="text"/>	
5 <input type="text"/>	
6 <input type="text"/>	

**Needs for Specific Classrooms**

Identify specific needs that you have for specific rooms. Please give room numbers and building names.

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**What are your preferences for configuring the room(s) in which you take classes?** (fixed vs. movable seating; table and chairs vs. tablet-arm chairs; tiered seating vs. flat seating; raised platform vs. stage etc.)

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**If you could change one thing about the classroom(s) in which you take classes, what would it be?**

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**Other Needs**

List other needs not identified elsewhere in this survey.

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**Comments**

Are there any other issues or needs for classrooms that you would like to bring to the attention of the task force?

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**What is your favorite classroom and why?**

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**What is your least favorite classroom and why?**

A large, empty rectangular text input box with a light beige background. It features a vertical scrollbar on the right side and a horizontal scrollbar at the bottom, both with small arrowheads.Two small, rectangular buttons with a light beige background and a thin border. The left button is labeled "Submit" and the right button is labeled "Reset".

**B. LIST OF STUDENT PARTICIPANTS (626 Total Responses)****1. Sorted Alphabetically by Major**

Unknown	5	Engineering	5
A&S Undecided	1	English	18
Accounting	11	Entrepreneurship and Venture Management	1
Adult & Higher Education	3	Environmental Engineering	2
Advertising	6	Environmental Science	1
Aerospace Engineering	4	Exercise Science	2
ALC	1	Film and Video Studies	3
AME	1	Finance	10
Anthropology	7	Fine Arts	2
Architecture	8	French	1
Astrophysics	2	Geography	4
Aviation	1	Geology	2
Biochemistry	6	German	1
Biomechanical Engineering	1	Graduate Social Work	1
Biomedical Science	2	Health and Sport Sciences	6
Botany	6	Higher Education Administration	1
Business	8	History	11
Business Economics	1	Human Relations	3
Business Management	4	ILAC	4
Business Marketing	3	Industrial Engineering	12
Ceramics	1	Information Studies	1
Certification Only	1	Instructional Leadership	1
Chemical Engineering	9	Instructional Psychology and Technology	2
Chemistry	4	Interior Design	11
Civil Engineering	3	International and Area Studies	5
Classics	1	International Business	3
College of Liberal Studies	1	International Relations	1
Communication	14	Journalism	14
Computer Engineering	5	Landscape Architecture	1
Computer Science	4	Language Arts Education	3
Construction Science	2	Law	3
Counseling Psychology	2	Letters	13
Criminology	2	Liberal Studies	2
Dental Hygiene	1	Library and Information Studies	2
Drama	2	Linguistics	7
EACS	2	Management	2
Early Childhood Education	2	Management of Information Systems	17
East Asian Studies	1	Marketing	12
ELE	1	Business Administration Masters	1
Economics	2	Mathematics	9
Education Psychology	11	MBA French	1
EDAH	7	Mechanical Engineering	15
Education	11	Meteorology	13
EIPT	2	Microbiology	12
Electrical Engineering	12	Masters in MIS	1
Elementary Education	8	Music	4
Energy Management	2	Music Education	1

Music Performance	1	Public Relations	9
Nuclear Medicine	2	Radiology	2
Nursing	2	Reading	1
Nutrition	1	Regional and City Planning	1
Organizational Leadership Europe	1	Religious Studies	6
Petroleum Engineering	2	Russian	1
Pharmacy	2	School Counseling	1
Philosophy	2	Science Educations	2
Physical Therapy	1	Secondary Education	2
Physics	2	Social Studies Educations	5
Political Science	15	Social Work	16
Pre-Med	3	Sociology	11
Pre-Nursing	3	Spanish	4
Pre-Physical Therapy	1	Special Education	3
Pre-Journalism	1	Studio Art	5
Pre-Nutrition	1	Supply Chain Management	1
Pre-Pharmacy	1	Undecided	6
Professional Writing	2	Visual Arts	1
Psychology Graduate Student	1	Visual Communication	1
Psychology Graduate Student	33	Women's Studies	1
Public Affairs and Administration	4	Zoology	25

## 2. Sorted Numerically by Major

Psychology Graduate Student	33	Business	8
Zoology	25	Elementary Education	8
English	18	Anthropology	7
Management of Information Systems	17	EDAH	7
Social Work	16	Linguistics	7
Mechanical Engineering	15	Advertising	6
Political Science	15	Biochemistry	6
Communication	14	Botany	6
Journalism	14	Health and Sport Sciences	6
Letters	13	Religious Studies	6
Meteorology	13	Undecided	6
Electrical Engineering	12	Unknown	5
Industrial Engineering	12	Computer Engineering	5
Marketing	12	Engineering	5
Microbiology	12	International and Area Studies	5
Accounting	11	Social Studies Educations	5
Education Psychology	11	Studio Art	5
Education	11	Aerospace Engineering	4
History	11	Business Management	4
Interior Design	11	Chemistry	4
Sociology	11	Computer Science	4
Finance	10	Geography	4
Chemical Engineering	9	ILAC	4
Mathematics	9	Music	4
Public Relations	9	Public Affairs and Administration	4
Architecture	8	Spanish	4

Adult & Higher Education	3	AME	1
Business Marketing	3	Aviation	1
Civil Engineering	3	Biomechanical Engineering	1
Film and Video Studies	3	Business Economics	1
Human Relations	3	Ceramics	1
International Business	3	Certification Only	1
Language Arts Education	3	Classics	1
Law	3	College of Liberal Studies	1
Pre-Med	3	Dental Hygiene	1
Pre-Nursing	3	East Asian Studies	1
Special Education	3	ELE	1
Astrophysics	2	Entrepreneurship and Venture Management	1
Biomedical Science	2	Environmental Science	1
Construction Science	2	French	1
Counseling Psychology	2	German	1
Criminology	2	Graduate Social Work	1
Drama	2	Higher Education Administration	1
EACS	2	Information Studies	1
Early Childhood Education	2	Instructional Leadership	1
Economics	2	International Relations	1
EIPT	2	Landscape Architecture	1
Energy Management	2	Business Administration Masters	1
Environmental Engineering	2	MBA French	1
Exercise Science	2	Masters in MIS	1
Fine Arts	2	Music Education	1
Geology	2	Music Performance	1
Instructional Psychology and Technology	2	Nutrition	1
Liberal Studies	2	Organizational Leadership Europe	1
Library and Information Studies	2	Physical Therapy	1
Management	2	Pre-Physical Therapy	1
Nuclear Medicine	2	Pre-Journalism	1
Nursing	2	Pre-Nutrition	1
Petroleum Engineering	2	Pre-Pharmacy	1
Pharmacy	2	Psychology Graduate Student	1
Philosophy	2	Reading	1
Physics	2	Regional and City Planning	1
Professional Writing	2	Russian	1
Radiology	2	School Counseling	1
Science Educations	2	Supply Chain Management	1
Secondary Education	2	Visual Arts	1
A&S Undecided	1	Visual Communication	1
ALC	1	Women's Studies	1

**III. EQUIPMENT NEEDS****A. SUMMARY OF PRIORITIZED NEEDS (1726 RESPONSES)****1. Equipment Needs: Pre-selected Categories**

	PRIORITY						TOTAL
	1	2	3	4	5	6	
Whiteboards	69	38	29	21	11	6	174
In-Class Computer	53	46	24	18	6	10	157
Video Projectors	54	36	21	24	10	10	155
Wireless Microphones	37	34	27	19	11	15	143
Amplified Sound System	47	30	16	17	14	10	134
Overhead Projectors	27	32	20	17	18	9	123
Clocks	33	21	28	11	11	15	119
DVD Players	18	31	21	16	12	10	108
Blackboards	31	17	11	10	4	7	80
Plasma Screens	8	19	15	7	9	12	70
VCRs	4	9	19	12	11	9	64
Slide Projectors	6	12	15	6	8	3	50
In-Class Voting Receiver	5	8	7	6	7	2	35
Document Camera (Elmo)	4	9	8	8	3	2	34
Tape Recorders	6	5	3	2	3	1	20
Map Hooks	4	3	2	3	3	2	17

**2. Equipment Needs: Top Write-in Categories**

Desk space	20
Wireless Internet	19
TV	18
Internet	11
Network Access	10
Projector Screen	9
Chalk	8
Pencil Sharpeners	8
Better Seats	8
Chairs	8
Laptop Connections	7
Markers	7
Desks	5
Electrical Plug-ins	5
Central Air Conditioning	5

**3. Other Equipment Needs Cited (Number of Citations in Parenthesis)**

Data Ports in Desks (4)	Lab Equipment (1)
Smart Boards (4)	Laptop Computers (1)
Flat Screens (3)	Lasers (1)
Lights (3)	Left-Handed Desks (1)
Better Lighting (2)	Maintenance/Repair (1)
Carpet in Classrooms (2)	Mats (1)
Coffee Machine (2)	Mini-blinds (1)
Computer lab Classrooms (2)	More Lecture Halls (1)
Drafting Tables (2)	More Studio Space (1)
Erasers (Foot long) (2)	New Desks (1)
Furniture (2)	Operable Windows (1)
Left-Handed desks (2)	Outdoor Classrooms (1)
Piano (2)	Paper (1)
Podiums (2)	Pin-up Space (1)
Smart boards (2)	Printers (1)
Staplers (2)	Projector Interface Design (1)
Widescreen Projection (2)	Quadraphonic Sound (1)
World Map (2)	Remote Slide Changers (1)
Air Circulation (1)	Safety Hooks (1)
Air Filters (1)	Screens (1)
Background music Before Class (1)	Seating (1)
Bathroom Renovation (1)	Stools in Interior Design Studio (1)
Better Maps (1)	Tables (1)
CD Player (1)	Telephones (1)
Colored Chalk (1)	Temperature Control (1)
Disco Strobe (1)	Trashcans (1)
Dissection Razor Blades (1)	Update Technology (1)
Dual Turntables (1)	Ventilation (1)
Easels (1)	Video Cameras (1)
Electric Kiln (1)	Virus Checks on Computers (1)
Filmmaking Equipment (1)	Weather Stripping (1)
Fix Drawing Tables (1)	Web Cameras (1)
Free Books (1)	Working Equipment (1)
Fume Head in Chemistry Lab (1)	Working Media Players (1)
In-class Instruction Sheets (1)	Zoology Lab Equipment (1)
Kleenex (1)	

## B. SUMMARY OF OPEN-ENDED COMMENTS

### Number of Comments by Category

<u>CATEGORY</u>	<u>NUMBER</u>
Chalkboards/Whiteboards	41
Microphones and Sound Systems	28
Non-equipment problems	28
Video Projectors	25
Seating	25
Wireless network access, Laptops and Computers	21
Things are fine	17
Clocks	16
Transparency Projectors	12
Extraneous	11
Televisions, VCRs and DVDs	11
Document Cameras	4
Pencil Sharpeners	3
Voting Receivers	2
Maps	2
Miscellaneous Suggestions	33

## C. GENERAL CONCLUSIONS

**Whiteboards /Chalkboards:** The equipment need most often cited by students was whiteboards. Students clearly prefer whiteboards to chalkboards. They perceive chalkboards to be outdated, harder to read, messier, and more problematic for allergy sufferers. The inability to erase them effectively is a repeated theme in the open-ended comments. However, the problem most often cited by students was poor legibility of both whiteboards and chalkboards due to poor maintenance and/or age.

**Video Projectors and related technology:** The second most desired equipment item was the video projector. Students want more rooms equipped with video projectors and they want projectors that are easier to use and have higher resolution than the older ones currently in use. The main reason that students want video projectors is so that faculty can make PowerPoint presentations in class. Students also want better **internet access** in classrooms, and wider **wireless network coverage**. A need for electrical power outlets in classrooms for laptops is also a frequently expressed need.

**Microphones and Sound Systems:** The third-place need is for sound amplification to improve the ability of students to hear the instructor, film, PowerPoint presentation or other sounds. The need is especially acute in large classroom. Wireless microphones are mentioned as a need, although many comments relate to their propensity to cause feedback. Perhaps carefully positioned ceiling microphones would be more effective.

**Seating:** Improved seating is a need that appears under many categories of this survey. Students want more comfortable seating. They want desks that provide enough area for a textbook, a laptop and/or a calculator, and seats of a size to accommodate the increasing height and weight of the average adult. In rooms with tablet-arm chairs, left-handed students complain about the inadequate numbers of left-handed tablets.

**Clocks:** Students are concerned about the lack of a visible clock in many classrooms or the inaccurate time shown by clocks.. They want every classroom to have an accurate clock that is positioned so students and the teacher can see it.

**Transparency projectors:** Students sympathize with the faculty about the bulky chains used to secure transparency projectors. Some also complain about their ineffective use by teachers, because of small handwriting or positioning in the room.

**Televisions VCRs and DVDs:** Students favor the general availability of DVD playback in classrooms. The majority of comments about VCR's are about the lack of maintenance.

**Other equipment:** Other equipment needs cited by smaller numbers of students include document cameras, pencil sharpeners, maps and voting receivers.

**Other issues:** In this section, students also commented on climate control, the need for more classroom maintenance, newer equipment, and expanded training. Seventeen students indicated general happiness with the status quo.

**IV. PHYSICAL NEEDS**

**A. SUMMARY OF PRIORITIZED NEEDS (1588 RESPONSES)**

**1. Physical Needs: Pre-selected Categories**

	PRIORITY						TOTAL
	1	2	3	4	5	6	
More Comfortable Seating	113	90	45	23	9	6	286
Larger Tablet on Chairs	119	57	23	7	6	5	217
Larger Chairs	47	47	20	4	8	2	128
Pencil Sharpeners	16	30	35	18	13	11	123
Movable Tables and Chairs	26	31	17	8	9	3	94
Access for Students with Disabilities / Wheelchair Access	32	16	14	15	10	5	92
Light Dimmers	15	23	20	17	7	10	92
Electrical Outlets	22	18	17	19	11	2	89
Windows	8	14	22	14	13	8	79
Trash Cans	3	15	15	17	8	12	70
Blackout Drapes	7	14	13	10	8	2	54
Tablet-arm Chairs	2	7	5	10	7	3	34
Door Closure	3	0	7	6	1	2	19
Lecterns	0	3	1	0	3	4	11
Numbered Seats	1	3	1	2	1	2	10
Locks	1	0	1	0	0	2	4

**2. Physical Needs: Write-in Categories**

Larger Desks	44
Left-Handed Desks	24
Fewer Seats	11
Ethernet Port/Internet Access	9
Better Classroom Layout	6
Room Temperature	6

**3. Other Physical Needs Cited (Number of Citations in Parenthesis)**

- |                                     |                                      |
|-------------------------------------|--------------------------------------|
| Wireless Internet (4)               | Stools in Studio (2)                 |
| Group Tables (3)                    | Bathroom Curtains (1)                |
| More Seats (3)                      | Bathrooms on every floor (FJC) (1)   |
| Staplers (3)                        | Better Bathrooms (1)                 |
| Window Treatments (3)               | Better Board Erasers (1)             |
| Clocks (2)                          | Better Lighting (1)                  |
| Discussion Rooms w/Round Tables (2) | Buzzers (1)                          |
| Door Stops (2)                      | Carpet (1)                           |
| Doors (2)                           | Classroom labeling (1)               |
| Level Desks in Catlett (2)          | Clean Room (1)                       |
| New Carpet (2)                      | Closer access to water fountains (1) |
| Repaired Chairs and Desks (2)       | Cloth Covered Chairs (1)             |

Coat Hooks (1)	Music Before Class (1)
Coffee Makers in Hallways (1)	New Book Store (1)
Color Chalk Board (1)	New Floors (1)
Computer Lab Tables (1)	New Seating (1)
Cubby for Professors things (1)	No more Swivel Chairs (1)
Decent Classroom (1)	Orange Shag Carpet (1)
Don't overcrowd classrooms (1)	Padded Seats (1)
Doors on Bathroom Stalls (1)	Podium in Every Classroom (1)
Dry Erase Boards (1)	Power Supplies (1)
Elevator in FJC (1)	Recycle Bins (1)
Fixed Ceiling (1)	Seats without Holes (1)
Footrest on Back of Chairs (1)	Shades Over Windows in Doors (1)
Laptop Projectors (1)	Smoke Generators (1)
Larger Blackboards (1)	Soundproofing (1)
Larger Classrooms (1)	Student Lounge (1)
Larger Desks (1)	Taller Chairs (1)
Larger Rooms (1)	Theme Murals in the Hall Relevant to the Portrait (1)
Lockers (1)	Ventilation (1)
Microphone (1)	Visibility of Board (1)
More Computer Labs (1)	Wheel Chair Seating (1)
More Computer Plug-ins (1)	
More Room Between Rows (1)	
More room for students (1)	

## B. SUMMARY OF OPEN-ENDED COMMENTS

### Number of Comments by Category

<u>CATEGORY</u>	<u>NUMBER</u>
Desks/chairs	135
General and Maintenance	61
Room Size/configuration	22
Electric/Technology needs	19
Additions to Rooms	17

## C. GENERAL CONCLUSIONS

**Seating.** By far, the greatest physical need cited by students for was better seating in classrooms. Students overwhelmingly want seats that are more comfortable, larger (to accommodate larger bodies), and that have more writing surface than traditional tablet-arm chairs. Students want enough surface area to hold all of the items they typically bring to class, including laptop computers. A large number of students also expressed a preference for tables and chairs over tablet-arm chairs. Many students cited the need for more left-handed tablet-arm chairs. A related problem cited is the need to maintain the furniture and to fix chairs when they become broken.

**Pencil Sharpeners.** The second most cited physical need was for pencil sharpeners.

**Reduced crowding.** Another frequently voiced concern was the need for classrooms to be less crowded,

for comfort and safety as well as to provide better access for students with physical disabilities. The perception is that many classrooms have too many chairs in them for the size of the room. Many classrooms have so many chairs in them that students and faculty have difficulty walking between them and the movement of wheel chairs is completely blocked. Classroom design was also mentioned as a problem in relation to the ability of students with physical disabilities to access classrooms. Maintenance is also an issue in this regard with students reporting that their classrooms are often made more crowded by pieces of broken furniture and equipment.

**Lighting.** Many students are concerned about the quality of lighting in classrooms. Students want faculty to be able to control the level of light using dimmers and blackout curtains. Students also want better quality lighting, including windows to allow daylight to enter classrooms.

**Electrical outlets** were cited as a need by many students, presumably to allow them to plug in lap top computers during class.

**Cleanliness and Maintenance.** Students are concerned about the poor physical condition of classrooms and want classrooms to be kept cleaner and be better maintained. An adequate number of trash cans were cited as a need by many students.

**Other.** Other needs cited with some frequency include: internet access and the ability to access the internet during class; better acoustics; better air conditioning, and the need for a variety of classroom configurations to suit different needs.

**V. SUPPORT NEEDS****A. SUMMARY OF PRIORITIZED NEEDS (640 RESPONSES)****1. Support Needs: Pre-selected Categories**

	PRIORITY						TOTAL
	1	2	3	4	5	6	
Internet Connectivity	187	39	13	7	4	3	253
Maintenance of Technology	29	43	22	7	3	1	105
On Call Troubleshooting	22	28	24	12	6	0	92
Replacing Batteries	8	11	8	7	11	3	48
Disabled Student Services	24	8	9	5	3	2	51

**2. Support Needs: Top Write-in Categories**

Computer Lab	10
Electrical Outlets	10

**3. Other Support Needs Cited (Number of Citations in Parenthesis)**

Faster Computers (3)	In-Class Voting (1)
Instructor Knowledge of Computer (3)	International Student Services (1)
Replace Overhead Light bulbs (3)	Laptop Batter Replacements (1)
Computer Lab Printers (2)	Laptop Service Desk (1)
Enrollment Open More Often (2)	Larger & Disabled Seating (1)
More Attentive Support for Televised Equipment (2)	Larger Language Lab (1)
More Working Copiers (2)	Laser Pointers (1)
Remotes (2)	Less Microsoft (1)
A/C & Heating Controls (1)	Less Students per Class (1)
Access for Wheelchairs (1)	More 24 hour Computer Labs (1)
Advising (1)	More Access to Library Files and Documents (1)
Afternoon Seminars on how to make web-pages (1)	More Advanced Features of Recording Classes (1)
Afternoon Seminars on how to use Smart boards (1)	More Computers with MS Word (1)
Answers to all Questions (1)	More Printers (1)
Better Access to Software (1)	More Technology (1)
Better Hardware & Software (1)	More Training on Equipment (1)
Better Information Websites (1)	Non-Mandatory Class Presence (1)
Blackboard Needs Help (1)	Overall Up-keep of the Rooms (1)
Chocolate Milk Dispensers (1)	Plasma Screen on Wall with plug-in to Internet (1)
Clean Keyboards in Labs (1)	Quicker Response Time for Troubles (1)
Clocks Correct (1)	Rapid e-mail Reply (1)
Easier Access to Equipment (1)	Replace Computer Mice (1)
Elevators (1)	Replacing Bulbs in Projectors (1)
Fix Elevators (1)	Return Internet Access to All Library Computers (1)
General Maintenance (1)	Spare Lamps for Projector System (1)
Handicapped Doors (1)	Student Apartments (1)
In-Class Support (1)	

Student-Accessible Computer Projection Connections (1)	Updated Technology (1)
Technology Experts (1)	Virus Cleaners/Erasers (1)
Telephone (Pay Phone) (1)	Wireless Card Rental (1)
	Working Printers (1)

## B. SUMMARY OF OPEN-ENDED COMMENTS

### Number of Comments by Category

<u>CATEGORY</u>	<u>NUMBER</u>
Other/general support	26
Working Equipment	26
Wireless connectivity	23
On Call help	13
Internet connectivity	12
Training	6
Courseware software (e.g. Blackboard)	1

## C. GENERAL CONCLUSIONS

**Internet Connectivity.** Overall the most important support need cited by students was the ability to access the internet. Many students would like to do so using wireless connections, with some citing the need for wireless connectivity across the whole campus. In support of classroom computing, students cite the need to increase the number of electrical outlets in each classroom to allow them to plug in laptops.

**Maintenance.** Of related importance was the need for equipment to be in good working order. Many students commented that the equipment in classrooms is not working. The need to replace light bulbs in projectors and batteries and the poor quality of projection were cited as specific problems. In general, students felt that OU should check equipment regularly and maintain it.

**Timely Help.** Help is needed to be able to fix problems on very short notice to avoid class delays and disruptions. Some type of on-call help was desired by several respondents.

**Computer Labs.** The configuration of computers and the slow speed of the computers were cited as problems in computer labs.

**Training.** Students also cite need for posted directions on how to use equipment and training for faculty on how to use equipment.

**Other.** Many comments related to specific area and to overall need for computing resources.

**VI. ENVIRONMENTAL NEEDS AND MAINTENANCE****A. SUMMARY OF PRIORITIZED NEEDS (1538 RESPONSES)****1. Environmental and Maintenance Needs: Pre-selected Categories**

	PRIORITY						TOTAL
	1	2	3	4	5	6	
Temperature Control	92	46	45	21	23	10	237
Space Between Seats	57	43	38	22	14	8	182
Cleaning Classrooms	62	16	18	5	7	11	119
Furniture Maintenance	22	35	23	13	9	8	110
Backpack Storage	18	34	21	25	5	4	107
Reduction of Outside Noise	29	23	21	11	15	4	103
Erasing Blackboards	37	30	11	6	8	6	98
Classroom Lighting	40	8	13	13	14	3	91
View of Presentation	8	20	16	19	11	14	88
Ventilation	6	17	8	4	10	12	57
Odor Control	17	15	10	7	2	2	53
Reduction of Classroom Noise	13	9	14	5	6	4	51
Room Maintenance	6	13	11	9	3	6	48
Painting	11	11	9	6	2	7	46
Carpet	15	13	8	3	0	4	43
Sound Dampening	3	7	3	3	8	3	27
Tile	1	1	3	4	4	1	14

**2. Other Environmental and Maintenance Needs Cited (Number of Citations in Parenthesis)**

Clean Floors (4)	Doors in Back of Classroom (1)
Clean Bathrooms (3)	Double Pane Windows (1)
Clean Desks (3)	Drapes (1)
Clean Labs (2)	Dry Erase Boards (1)
Elevators (2)	Fix Tables, they slope or don't stay up (1)
Janitorial Services (2)	Food & Drinks (1)
Recycling Bins in Classrooms (2)	Hot Water (1)
Too Many Desks (2)	Kleenex (1)
Accommodating Classrooms (1)	Larger Chalk (1)
Architecture Building (1)	Larger Desks (1)
Better Designed Pop-up Plug Access (1)	Less Furniture (1)
Better Sewage System to Drain Water When it Rains (1)	Microphones (1)
Boring Rooms (1)	More Class Openings (1)
Clean Hallways and Stairwells (1)	More Comfortable Desks (1)
Clean Windows (1)	Movable Desks (1)
Cleaner Water Fountains (1)	Natural Growth Plant life (1)
Cleaning Keyboards (1)	New Building (1)
Coat-Racks (1)	NO carpet (1)
Cockroaches (1)	No Smoking Near Buildings (1)
Dilapidated Facilities in Chem. Building (1)	Paper Towel and Soap Refills (1)
	Pencil Sharpeners (1)

Plumbing (1)  
 Projector Chains (1)  
 Remove Clutter (1)  
 Running Hot Water (1)  
 Sanitation (1)  
 Trash Removal (1)

Turn off Cell phones (1)  
 Up-to-Date Facilities all over Campus (1)  
 WD40 the Doors (1)  
 Whiteboards Do Not Erase (1)  
 Windows (1)

## B. SUMMARY OF OPEN-ENDED COMMENTS

### Number of Comments by Category

<u>CATEGORY</u>	<u>NUMBER</u>
Temperature Control	70
Seating	67
Custodial Services	64
Noise Control	33
Health Hazards	16
General Problems	16
Maintenance	12
Paint, Carpet, and Floors	12
Lighting	6
Things are OK	6

## C. GENERAL CONCLUSIONS

**Temperature Control.** The number one environmental problem cited by students was the temperature in classrooms. Room's being too cold was cited more often than room's being too hot, but, in general, students want to be able to adjust the temperature in their classrooms to make them comfortable for learning. The specific need for central air conditioning in Rhyne Hall was noted. Double pane windows to save energy and reduce noise was suggested.

**Overcrowding.** The second most cited need was for less crowding in classrooms. Students are upset about overcrowded classrooms with too many students, too many chairs/desks, and too narrow aisles. Students also complained about the lack of space to store backpacks in classrooms.

**Custodial Services.** The third most cited need was for improved custodial services. Classrooms were described as being dirty and/or trash-filled with sticky floors. Many students complained about poorly cleaned blackboards and whiteboards. Also cited were poorly maintained restrooms, odor problems and dirty desktops. A suggestion was made to start the campus-wide "Big Event" by cleaning classrooms.

**Seating.** There was a litany of complaints about classroom seating. These include the need for better seating, larger seats, and larger desk surfaces, especially with adequate space to use laptops. Broken chairs were frequently cited as a problem. Some students noted that in many classroom some of the seats have a very poor view of the blackboard or AV display.

**Noise Control.** Many students cited excessive noise in classrooms as a problem. Although noisy HVAC units and movies in adjacent classrooms were cited as problems, there were twice as many complaints about noise from people in the hall outside the classroom and professors in adjacent classrooms who do not close the door when they lecture. Poor room acoustics and construction noise were also cited as problems.

**Maintenance.** The importance of regular maintenance, including repairing classroom furniture and cleaning blackboards and whiteboards was noted. Students also cited the rubber edges on classroom steps, inaccurate clocks, and elevator maintenance as problems.

**Lighting.** Poor classroom lighting and broken light fixtures were cited as problems that need to be fixed.

**Visibility.** Students also cited the need to be able to view classroom presentations.

**Health Hazards.** Mold and odor problems in Kaufman and Gittinger Halls were mentioned specifically. One complaint cited a bug problem in the library.

**General Problems.** The general lack of pencil sharpeners and blackout drapes were noted while one student complained about the chains that anchor overhead projectors. Five buildings were noted as having general problems. The outdated appearance of many classrooms was also cited. The absence of power outlets and network connections were also cited as problems.

**Paint, Carpet, and Floors.** The need for paint and new floor coverings in classrooms and in buildings across campus were the subject of a dozen comments.

## VII. NEEDS FOR SPECIFIC CLASSROOMS

### A. SUMMARY OF OPEN-ENDED COMMENTS

#### NUMBER OF COMMENTS BY CATEGORY

<u>CATEGORY</u>	<u>NUMBER</u>
Dale Hall	13
Gittinger	5
Felgar	4
George Lynn Cross	4
Kaufman	3
Physical Sciences Center	3

### B. GENERAL CONCLUSIONS:

The survey of students followed the same general patterns of dissatisfaction that were found in the survey of faculty.

In the student survey, Dale and Physical Sciences are #1 and #2, respectively, as the worst classrooms, whereas they were tied for first place in the faculty survey. Kaufman is #3 on both surveys, whereas George Lynn Cross, which is #3 among the faculty is #6 among the students. Gittinger is #4 for both groups, with basic cleanliness being the key issue. Felgar is number #6 among students but does not make the top 6 among the faculty. Catlett is #6 for faculty, but does not make the top 6 among students.

Dale, Physical Sciences, Kauffman and Gittinger rank high because core survey courses are taught in those buildings (history, English foreign languages, the sciences). The differences between faculty and student complaints may be due, at least in part, to the faculty having more exposure to the same instructional spaces year after year whereas students spend far less time in any particular classroom?

1. Students and faculty strongly agree that basic maintenance is the overwhelming need: cleaner classrooms with fewer chairs and other obstructions to student/faculty interaction.
2. If these problems are going to be addressed, the upgrade in maintenance needs to be accompanied by an effective system through which problems can be reported and relayed quickly to those responsible.
3. Overcrowding points to the need for more classroom space, which means more buildings. This must be a high priority.

## VIII. PREFERENCES FOR CONFIGURING CLASSROOMS

### A. SUMMARY OF OPEN-ENDED COMMENTS

#### NUMBER OF COMMENTS BY CATEGORY

<u>CATEGORY</u>	<u>NUMBER</u>
<b>SEATING (384)</b>	
Prefer tables and chairs	129
Prefer movable seating	127
Prefer fixed seating	85
Prefer tablet-arm chairs	26
Do not prefer tablet-arm chairs	14
Do not prefer auditorium style seating	1
Sufficient left handed tablet-arm chairs	1
Prefer stools and movable easels	1
<b>ROOM CONFIGURATION (223)</b>	
Prefer tiered rooms	131
Prefer raised platforms or stage	53
General	25
Prefer flat rooms	14
<b>COMFORT (36)</b>	
<b>MISCELLANEOUS (3)</b>	

### B. GENERAL CONCLUSIONS

**Dislike of Tablet-arm Chairs.** Many students were adamant about their intense dislike for tablet-arm chairs. Terms like “hard” and “confining” were used. They were described as “grade school desks,” “desks from the 1950s high school era,” and “the invention of the devil.” Students made comments like “I HATE THEM.” Several students mentioned that tablet-arm chairs made it difficult to learn. Although the percentage of faculty who prefer tables and chairs to tablet-arm chairs is approximately the same as the percentage of students with this preference, the students obviously dislike tablet-armchairs far more than faculty do, most likely because they are the ones who have to sit in the chairs.

**Tables and Chairs.** Students prefer tables and chairs over tablet-arm chairs by a margin of almost 3 to 1. While two students did state a dislike of tables and chairs, neither stated it with the intense acrimony that many students used for tablet-arm chairs. Moveable chairs are preferred in smaller classrooms, whereas fixed seating is more acceptable in larger rooms.

**Comfortable Seating.** Students think that the seating should be comfortable for a wide range of people, including tall people, short people, people of large girth, bony people, thin people, and pregnant women. They also want a chair that is large enough to hold their body.

**Lack of Space.** Students currently feel that they have insufficient personal and work space in many classrooms. This shows up in several categories. Students want to be able to get to a seat in the middle of a row, even when other students are already seated without crawling over the other

students. They also want a place to put their personal items like backpacks and laptop computers. They want a work surface that is sufficiently large to hold a book, paper, and possibly a laptop computer. And they want to be able to see and hear the instructor.

**Movable versus Fixed Seating.** Fixed seating was seen as beneficial in large classrooms (such as those in Nielsen and Adams), whereas movable seating was frequently preferred for smaller classrooms. The students who preferred fixed seating sometimes stated that fixed seating makes the classroom more orderly and neat. One stated that the disorderly seating leads to disorderly thinking.

**Tiered Classrooms.** As with faculty, students tend to think that larger classrooms need to be tiered and smaller classrooms should be flat.

**Favorite Classrooms.** Although there is another survey question that addresses favorite classrooms, it is clear that Nielsen and Adams halls are generally well liked by students. It is promising that these are two of the most recently renovated classrooms on campus. A third recently renovated classroom in Carson was also listed as a favorite, although the overcrowding of this room was mentioned.

## IX. IF YOU COULD CHANGE ONE THING ABOUT THE CLASSROOM(S) IN WHICH YOU TAKE CLASSES, WHAT WOULD IT BE?

### A. SUMMARY OF OPEN-ENDED COMMENTS

#### Number of Comments by Category

<u>CATEGORY</u>	<u>NUMBER</u>
Seating/More comfortable/better/more room	107
Improve configuration/spacing/ bigger classrooms or fewer people/better view of boards	76
Temperature control	43
Update/remodel	33
More technology accessible, multimedia based, projectors	19
Change the blackboards to whiteboards/clearer blackboards/more of them	17
More natural light/ more windows/more control over lighting/dimmer switches	17
Cleanliness (in general)	14
Data ports and/or a wireless network/access to the internet/in class computers	8
Eliminate outside noise/improve acoustics	7
More left-handed desks	4
Pencil Sharpeners	4
Microphones working properly	2
Miscellaneous	25

### B. GENERAL CONCLUSIONS

**Seating.** The thing that most students would change about their classrooms is classroom seating. Whether they have table arms or not, students want comfortable chairs, preferably padded, that are of adequate size to accommodate their bodies. They also want more surface area to hold all the gear they bring to class, especially laptop computers. Although this overlaps with the second most popular change, they also want enough space between the desks or seats to allow them to move easily between rows and store their backpacks and coats.

**Room configuration.** The second most preferred change would be to improve room configuration to decrease crowding and improve visibility. Students want more space between desks or chairs, and the seating arranged to maximize visibility of the teacher and the various writing boards, projection screens and A/V equipment in the room.

**Temperature control.** The clear third place goes to improving temperature control. It is hard to pay attention and learn in a classroom that is too cold or too hot. Students and faculty want to be able to adjust the temperature of their classrooms to create a comfortable learning environment.

**Other.** Other preferred changes include: adding more projection/multimedia technology; adding whiteboards; improving lighting and adding control over light levels; improving custodial services; improving access to the internet, reducing classroom noise and adding more left-handed desks.

**X. OTHER NEEDS****A. SUMMARY OF OPEN-ENDED COMMENTS****NUMBER OF COMMENTS BY CATEGORY**

<b>CATEGORY</b>	<b>NUMBER</b>
Physical Plant related / Room Maintenance	19
Instructional Technology / Audiovisual concerns	10
Number and size of classrooms	10
Environmental / Noise, etc.	8
Furniture	4
Esthetics	3
Instructors / Grad Assistants	3
Money	3
Waiting Areas	3
Accessibility	2
Miscellaneous	10

**B. GENERAL CONCLUSIONS**

**Maintenance.** The number one “other” need was for better maintenance of classrooms and classroom buildings.

**Quantity and Number of Classrooms and Instructional Technology.** The overall low number and generally poor quality of classrooms was tied for second with the need for improved instructional technology in classrooms..

**XI. GENERAL COMMENTS****A. SUMMARY OF OPEN-ENDED COMMENTS****Number of Comments by Category**

<b><u>CATEGORY</u></b>	<b><u>NUMBER</u></b>
Non-classroom-related Comments	14
AV/IT Equipment	12
Classroom Environment	12
Cleanliness/Maintenance	12
General/Miscellaneous	12
Configuration/Furniture	11
Program/Room-Specific	10
Black Boards/Whiteboards	5
Clocks	4
Pencil Sharpeners	3
Quantity/Size of Classrooms	3
Elevators	2
Access for the Disabled	1
Comments on the Survey	1

**B. GENERAL CONCLUSIONS**

The comments in this section recapitulated many of the comments made in other sections of the survey. The need for improved A/V equipment was the single most frequently mentioned item, followed by classroom environment, maintenance and room configuration/furniture. This section also included numerous comments not directly related to classrooms, including complaints about quality and cleanliness of restrooms, tuition, and parking.

**XII. WHAT IS YOUR FAVORITE CLASSROOM AND WHY?****A. SUMMARY OF OPEN-ENDED COMMENTS****Number of Comments by Category**

<b><u>CATEGORY</u></b>	<b><u>NUMBER</u></b>
Nielsen Hall	123
Not Specified/No Favorite	33
Adams Hall	28
Dale Hall	24
Physical Sciences Center	18
Sarkeys Energy Center	17
Collings Hall	12
Dale Hall Tower	12
Carson Energy Center	11
Gittinger Hall	9
George Lynn Cross Hall	7
Carpenter Hall	4
Bizzell Library	3
Catlett Music Center	3
Burton Hall	2
Copeland Hall	2
Gould Hall	2
Assessment Center	1
Carnegie Building	1
Children's Institute	1
Continuing Education Building	1
Dept. of Communication Conference Room	1
Forum Building	1
Fred Jones Art Center	1
Goddard Hall	1
Honors Center	1
Honors College	1
Kaufman Hall	1
Microbiology Lab	1
Orchestra Hall	1
OU Counseling Psychology	1
OU Health Science Center	1
Pittman recital Hall	1
Rhyne Hall	1

## B. GENERAL CONCLUSIONS

**Nielsen Hall.** The run-a-way winners as the most popular classrooms on campus are the two new lecture rooms in Nielsen Hall, A102 and A204. These rooms are large, seating 150 and 250 students, respectively, with tiered seating and fixed tables with attached fixed seating. Every student has an individual electrical outlet and internet connection for plugging in a laptop computer. The rooms are equipped with a large number of high quality blackboards, two large drop down projection screens and three independent video projectors. The rooms have excellent overhead lighting and windows that admit daylight. The level of lighting is completely controllable through rheostatic control and black-out shades on the windows. As cited in the survey responses, students like these two rooms because they:

- have comfortable seating
- provide adequate surface area for writing and holding paraphernalia
- provide under-desk storage space for coats and backpacks
- provide unrestricted visibility of the instructor, the blackboards and the screens from anywhere in the room
- are spacious and have adequate circulation space between the rows of seats and plenty of “elbow room” for each student
- have excellent acoustics and a good quality amplified sound system

**Adams Hall.** The rooms that came in a distant third and fourth place are the two large lecture halls in Adams Hall, Adams 150 and 255. Although older in design, these rooms are similar to the Nielsen lecture halls in having tiered seating with fixed tables and fixed chairs. They all are equipped with large blackboards and up to 3 drop down projection screens and video projectors. Not surprisingly, students cite the same reasons for liking these rooms as for the rooms in Nielsen Hall: comfortable seating with adequate surface area and elbow room; adequate circulation and storage space; unrestricted visibility; and good acoustics with an amplified sound system.

**Other rooms.** The list of favorite rooms is quite long, including both large lecture halls and smaller classrooms. Some have fixed seating some have moveable seating. Some have tablet-arm chairs, some have tables and chairs. Some have lots of technology, other have minimal technology. What they all have in common is a combination of comfortable seating, a sense of spaciousness and the ability for students to see and hear what is going on in the room

**XIII. WHAT IS YOUR LEAST FAVORITE CLASSROOM AND WHY?****A. SUMMARY OF OPEN-ENDED COMMENTS****Number of Comments by Category**

<b><u>CATEGORY</u></b>	<b><u>NUMBER</u></b>
Dale Hall	53
Gittinger Hall	47
Kaufman Hall	47
Physical Sciences Center	44
Not Specified/No Least Favorite	44
George Lynn Cross Hall	16
Carson Energy Center	13
Felgar Hall	12
Sarkeys Energy Center	12
Gould Hall	11
Adams Hall	9
Dale Hall Tower	9
Burton Hall	8
Nielsen Hall	6
Catlett Music Center	3
Fred Jones Art Center	3
Hester Hall	3
Carpenter Hall	2
Rhyne Hall	2
Biological Station	1
Bizzell Library	1
Buchanan Hall	1
Carnegie Building	1
College of Education	1
Collings Hall	1
Copeland Hall	1
Fine Arts Center	1
Forum	1
Huston Huffman Center	1
Old Science Hall	1
Robertson Hall	1
Science Annex	1
Sutton Hall	1

## B. GENERAL CONCLUSIONS

There are no clear “winners” in this dubious category. The rooms with the largest number of individual citations are PHSC 201 (10 citations), CEC 117 (7 citations), DH 116 (5 citations), SEC N292 (5 citations), probably because these are larger rooms with more students to complain about them. Although specific rooms are usually not cited, the small classrooms in Dale, Gittinger, and Kaufman Halls are generally regarded to be the worst classrooms on campus.

As cited in the survey responses, students dislike these and the many other rooms mentioned because they:

- have uncomfortable seating
- provide very little surface area for writing and none for computers or other items
- are crowded with too many desks for the space available, making students feel cramped together and making it difficult to move between the desks while leaving no place for them to put their belongings
- contain a jumble of poorly organized furniture, some of which is broken
- provide poor visibility of the instructor, boards and screens from various parts of the room, due to the lines of sight being too long or blocked by such obstacles as the heads of other students, poorly positioned furniture and posts.
- have poor acoustics or bad amplification systems making it hard to hear the teacher
- are dirty and often smell bad
- are either too cold or too hot
- have blackboards on which it is difficult or impossible to read what is written
- have projection screens that are too small, too low or positioned so that some students can't see them
- provide no or inadequate projection capabilities
- have lighting that is poor in quality and/or light levels that can not be variably adjusted
- are poorly maintained and visually ugly

## SECTION 7

# APPENDICES

*Available on-line*

- I. **CLASSROOM DATA** (<http://casweb.ou.edu/crtf/data.pdf>)
  
- II. **OPEN-ENDED COMMENTS FROM THE FACULTY CLASSROOM NEEDS SURVEY**  
(<http://casweb.ou.edu/crtf/faculty.pdf>)
  
- III. **OPEN-ENDED COMMENTS FROM THE STUDENT CLASSROOM NEEDS SURVEY**  
(<http://casweb.ou.edu/crtf/student.pdf>)