



MEMORANDUM

TO: Robert A. Blouin
Executive Vice Chancellor and Provost

FROM: Carol Tresolini 
Chair, Classroom Policy Steering Committee

DATE: June 20, 2018

RE: Master Plan for Modernizing Classrooms

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On behalf of the Classroom Policy Steering Committee, I am pleased to submit the attached master plan for modernizing Carolina's general purpose classrooms. The University faces the critical challenges of (1) the physical deterioration of our classrooms and (2) the need for spaces that support contemporary, evidence-based, interactive teaching and learning methods.

The attached plan proposes to tackle both of these challenges. Specifically, we recommend (1) updating fifty-four classrooms whose furniture is in critical need of replacement, (2) completing comprehensive renovations to create three interactive large-enrollment classrooms, and (3) instituting an ongoing program of annual maintenance to keep classrooms updated.

The Office of University Development is assisting with fundraising for the comprehensive renovation projects and selected classroom update projects; however, we anticipate that these projects will require both public and private funds. The Classroom Policy Steering Committee recommends considering implementation of a \$2.50 annual student fee to cover the cost of the proposed ongoing annual classroom maintenance fund, beginning in FY2024.

I look forward to talking with you about this plan and answering any questions you may have.

Master Plan for Modernizing Carolina Classrooms

June 2018

Background

The University Registrar schedules courses in 202 general purpose classrooms (GPCs), which range in size from small seminar rooms to large lecture halls. These classrooms are heavily utilized and serve the College of Arts and Sciences and several professional schools. Coordinating the management and support of these classrooms is the charge of the Classroom Policy Steering Committee, chaired by the Vice Provost for Academic Initiatives and including all of the classrooms' major stakeholders (Registrar, Facilities, Student Affairs, CFE, ITS, College of Arts and Sciences).

Our two major GPC challenges are (1) the physical deterioration of furniture and other basic classroom infrastructure, and (2) our inability to accommodate evolving teaching and learning needs of faculty members and students. The plan presented here addresses both of these problems.

Challenge 1: Physical Deterioration

Facilities Services has identified nearly sixty GPCs—almost a third of the University's total pool—that are in critical need of furniture replacement. In many cases, the furniture is more than 20 years old, nearly double the manufacturers' warranties. As a result of extended use, this furniture is beginning to fail. During the 2016-17 academic year alone, more than sixty seats had to be replaced.

Facilities Services receives a small but insufficient annual allocation to replace broken furniture, but no recurring allocation for furniture life-cycling. The strategy of replacing broken furniture on an ad hoc basis has run its course, as most of the failing furniture represents manufacturer lines that are no longer produced.

The Classroom Policy Steering Committee recommends that the University adopt a recurring funding model for maintaining and life-cycling furniture for its GPCs. In order to sustain teaching excellence, the University needs and deserves a more predictable model for ensuring its learning environments are functional and up to date.

Challenge 2: Evolving Teaching and Learning Needs

UNC faculty members are adopting interactive learning methods known to improve student engagement and learning outcomes and help level the playing field for under-represented minorities, first generation students, and other at-risk groups. Most of the University's classrooms, however, were designed for instructor presentation at the front of the room, making it difficult for faculty members to adopt active learning methods.

Consistent with the vision articulated by Chancellor Carol Folt in a 2016 [Wall Street Journal editorial](#), our learning spaces need to support collaborative, team-based learning where students "spend class time solving problems and debating issues." The University's new Blue Sky Initiative calls for an integrated set of student experiences and outcomes, including the ability to "collaborate effectively, and communicate with respect and civility, with others – especially in diverse scholarly, work, and community settings." These values also reflect the professional and civic environments most of our students enter after graduation.

These principles apply to classrooms of all sizes. Our lecture halls, where students spend a significant amount of their formative time as Carolina students, are especially antithetical to instructional methods that emphasize interaction and collaboration.

The University began implementing active learning designs in 2011. Classrooms outfitted with contemporary tablet-arm chairs on casters are being heavily utilized in foreign language courses. Disciplines such as Physics and Astronomy are restructuring their undergraduate curricula around studio/lab classrooms that emphasize team-based learning. In 2015, the University's first interactive lecture hall, Greenlaw 101, was completed.

[Evaluations](#) led by the Center for Faculty Excellence show that faculty members who teach in these classrooms are more professionally satisfied and that students are more engaged in the learning process in ways that are known to improve learning outcomes. Of the University's 202 general purpose classrooms, however, only 25 are currently designated as active learning classrooms.

Plan for Initial Modernization and Ongoing Maintenance and Development

In order to both address the physical deterioration of our classrooms and align our classrooms with the collaborative, evidence-based learning strategies that will drive the University's teaching mission, we propose an initial plan to (1) update fifty-four classrooms whose furniture is in critical need of replacement, (2) complete comprehensive renovations to create three interactive large-enrollment classrooms, and (3) institute an ongoing program of annual maintenance to keep classrooms updated.

Classroom updates (detailed in Appendix I) will involve integrating a new generation of mobile classroom furniture and additional enhancements for select classrooms that will serve collaborative learning goals. These include shared writing surfaces, the ability to display multiple images and have students participate wirelessly, and floor finishes that help mitigate room noise in an interactive environment. Flexible, interactive learning spaces require adequate space per student. Capacity in the targeted classrooms will be reduced an average of nearly 10% to better accommodate interactive furniture and collaborative design. Capacity targets have been established in close coordination with the University Registrar's Office. Under this plan, classroom updates will be completed incrementally over the next five fiscal years and will prioritize classrooms that (1) are equipped with furniture in greatest need of replacement, (2) have the seating capacity to support active learning, and (3) are used by departments where active learning techniques are already an integral part of the teaching culture.

Three *comprehensive renovation projects* (detailed in Appendix II) have been identified as strategically important to the University's instructional mission. They include the renovation of two lecture halls (Carroll 111 and Sitterson 014) and the consolidation of two mid-sized classrooms (Gardner 07 and 08) to form one larger space. These projects will give us the interactive large-enrollment classrooms that we currently lack.

Finally, following completion of the initial classroom updates, an *ongoing classroom maintenance fund*, to be managed by Facilities Services with guidance from the Classroom Policy Steering Committee, will ensure continual updating to serve the University's evolving instructional mission. This fund would be used to replace broken furniture; complete wall, floor, and ceiling repairs; and continue updating classrooms to support evolving instructional methods. It would allow recurring investments akin to those we make to regularly update classroom technologies and would ensure the continued evolution of our classrooms.

Modernizing our classrooms will result in significant changes to the University’s learning infrastructure, presenting an opportunity to support the teaching enhancement goals of faculty. The Center for Faculty Excellence and ITS Classroom Hotline will take the lead in creating new faculty development opportunities to help faculty leverage these classroom improvements.

Classroom Modernization Plan Budget

The budget for each of the proposed plan’s three parts has been developed in conjunction with Facilities Services and is presented below. The Office of University Development is assisting with fundraising for the comprehensive renovation projects and selected classroom update projects. The Classroom Policy Steering Committee recommends considering implementation of a \$2.50 annual student fee to cover the cost of the proposed ongoing annual classroom maintenance fund.

1. *Classroom updates.* Appendix I lists the limited renovations that would be implemented over the first five years of the proposed plan. These projects address both the need to replace furniture and the need to create interactive learning spaces.

2018-19	\$225,131
2019-20	\$225,131
2020-21	\$225,131
2021-22	\$225,131
2022-23	\$225,131
Total	\$1,125,655

2. *Comprehensive renovation projects.* These are detailed in Appendix II.

2018-19	Carroll design phase	\$250,000
2019-20	Carroll construction phase	\$1,650,000
2020-21	Carroll construction continued	\$169,136
2021-22	Sitterson design phase	\$100,000
2022-23	Sitterson construction phase	\$955,304
2023-24	Gardner design phase	\$120,000
2024-25	Gardner construction phase	\$1,158,133
Total		\$4,402,573

3. *Ongoing annual classroom maintenance,* following the completion of the classroom updates described in #1 above.

2023-24 and continuing, a recurring annual investment of \$75,000

Total costs per year are as follows:

2018-19	\$475,131
2019-20	\$1,875,131
2020-21	\$394,267
2021-22	\$325,131
2022-23	\$1,180,435
2023-24	\$195,000
2024-25	\$1,233,133
2025-26+	\$75,000

Appendix I – Classroom Updates

Phase	Bldg Name	Room	Dept Priority	Seats	Seat Type	New Seat Cost	AV/Tech	Whiteboards	Carpet / Flooring	Wall/Ceiling Finishes	Total Cost
1	Alumni Bldg	203	ANTH	28	Seats with Tablet	\$ 14,300		\$ 2,400	\$6,080	\$400	\$23,180
1	Dey Hall	203	ROML	30	Seats with Tablet	\$ 15,300		\$ 2,400	\$6,020	\$950	\$24,670
1	Dey Hall	204	ROML	30	Seats with Tablet	\$ 15,300		\$ 2,400	\$575	\$800	\$19,075
1	Dey Hall	208	ROML	32	Seats with Tablet	\$ 16,300		\$ 2,400	\$575	\$0	\$19,275
1	Dey Hall	210	ROML	20	Seats with Tablet	\$ 10,300		\$ 2,400	\$375	\$0	\$13,075
1	Dey Hall	301	ROML	22	Seats with Tablet	\$ 11,300		\$ 2,400	\$4,400	\$725	\$18,825
1	Dey Hall	303	ROML	29	Seats with Tablet	\$ 14,800		\$ 2,400	\$550	\$475	\$18,225
1	Dey Hall	401	GSSL	22	Seats with Tablet	\$ 11,300		\$ 2,400	\$425	\$425	\$14,550
1	Dey Hall	403	GSSL	25	Seats with Tablet	\$ 12,800		\$ 2,400	\$5,570	\$475	\$21,245
1	Dey Hall	404	GSSL	32	Seats with Tablet	\$ 16,300		\$ 2,400	\$600	\$500	\$19,800
1	Dey Hall	405	ROML	15	Seats with Tablet	\$ 7,800		\$ 2,400	\$3,104	\$375	\$13,679
1	Gardner Hall	106	ECON	38	Seats with Table	\$ 9,800		\$ 2,400	\$9,780	\$650	\$22,630
1	Gardner Hall	210	OUR	44	Seats with Table	\$ 11,300	\$ 12,445	\$ 2,400	\$11,400	\$700	\$38,245
1	Gardner Hall	308	ECON	45	Seats with Table	\$ 11,550	\$ 12,445	\$ 2,400	\$11,260	\$675	\$38,330
1	Greenlaw Hall	106	ENGL	18	Seats with Tablet	\$ 9,300		\$ 2,400	\$3,610	\$400	\$15,710
1	Greenlaw Hall	317	ENGL	24	Seats with Tablet	\$ 12,300		\$ 2,400	\$4,990	\$750	\$20,440
1	Greenlaw Hall	319	ENGL	34	Seats with Tablet	\$ 17,300		\$ 2,400	\$625	\$500	\$20,825
1	Hanes Hall	112	ROML	31	Seats with Tablet	\$ 15,800		\$ 2,400	\$600	\$500	\$19,300
1	Kenan Labs	B121	CHEM	32	Seats with Tablet	\$ 16,300	\$ 8,408	\$ 2,400	\$8,520	\$600	\$36,228
1	Kenan Labs	B125	CHEM	32	Seats with Tablet	\$ 16,300	\$ 20,000	\$ 2,400	\$9,060	\$625	\$48,385
1	Murphey Hall	117	GLSS	12	Seats with Table	\$ 3,300		\$ 2,400	\$300	\$500	\$6,500
1	New East	102	PLAN	40	Seat with Table	\$ 10,300		\$ 2,400	\$1,000	\$1,250	\$14,950
1	Peabody Hall	203	SOCI	43	Seats with Tablet	\$ 21,800	\$ 12,445	\$ 2,400	\$0	\$0	\$36,645
1	Peabody Hall	220	EDUC	35	Seats with Tablet	\$ 17,800	\$ 12,445	\$ 2,400	\$8,580	\$0	\$41,225
1	Peabody Hall	306	EDUC	40	Seats with Tablet	\$ 20,300		\$ 2,400	\$800	\$0	\$23,500
1	Phillips Hall	212	ASIA	22	Seats with Tablet	\$ 11,300		\$ 2,400	\$4,620	\$450	\$18,770
2	Bingham Hall	101	COMM	35	Seats with Tablet	\$ 17,800		\$ 2,400	\$575	\$1,925	\$22,700
2	Bingham Hall	217	COMM	30	Seats with Tablet	\$ 15,300		\$ 2,400	\$6,290	\$725	\$24,715
2	Bingham Hall	309	ENGL	25	Seats with Tablet	\$ 12,800		\$ 2,400	\$875	\$425	\$16,500
2	Bingham Hall	317	ENGL	35	Seats with Tablet	\$ 17,800		\$ 2,400	\$1,275	\$2,225	\$23,700
2	Caldwell Hall	208	PHIL	20	Seats with Tablet	\$ 10,300		\$ 2,400	\$3,375	\$1,475	\$17,550
2	Dey Hall	202	ROML	25	Seats with Tablet	\$ 12,800		\$ 2,400	\$450	\$725	\$16,375
2	Dey Hall	206	ROML	41	Seats with Tablet	\$ 20,800		\$ 2,400	\$700	\$0	\$23,900
2	Dey Hall	307	ROML	35	Seats with Tablet	\$ 17,800		\$ 2,400	\$600	\$500	\$21,300
2	Dey Hall	313	ENGL	27	Seats with Tablet	\$ 13,800		\$ 2,400	\$475	\$0	\$16,675
2	Dey Hall	402	GSSL	25	Seats with Tablet	\$ 12,800		\$ 2,400	\$450	\$425	\$16,075
2	Dey Hall	410	GSSL	22	Seats with Tablet	\$ 11,300		\$ 2,400	\$375	\$400	\$14,475
2	Dey Hall	412	GSSL	22	Seats with Tablet	\$ 11,300		\$ 2,400	\$400	\$400	\$14,500
2	Gardner Hall	1	ECON	32	Seats with Tablet	\$ 16,300		\$ 2,400	\$600	\$1,950	\$21,250
2	Gardner Hall	209	ECON	35	Seats with Table	\$ 9,050		\$ 2,400	\$7,460	\$550	\$19,460
2	Gardner Hall	307	ECON	41	Seats with Table	\$ 10,550	\$ 8,408	\$ 2,400	\$8,720	\$1,050	\$31,128
2	Gardner Hall	309	ECON	48	Seat with Table	\$ 12,300		\$ 2,400	\$1,200	\$700	\$16,600
2	Greenlaw Hall	222	ENGL	42	Seats with Tablet	\$ 21,300	\$ 12,445	\$ 2,400	\$775	\$550	\$37,470
2	Greenlaw Hall	302	ENGL	35	Seats with Tablet	\$ 17,800		\$ 2,400	\$650	\$1,275	\$22,125
2	Hamilton Hall	351	HIST	20	Seats with Table	\$ 5,300		\$ 2,400	\$400	\$400	\$8,500
2	Hanes Hall	107	STOR	31	Seats with Tablet	\$ 15,800		\$ 2,400	\$600	\$500	\$19,300
2	Murphey Hall	105	RELI	35	Seats with Tablet	\$ 17,800		\$ 2,400	\$600	\$500	\$21,300
2	Murphey Hall	111	CLAS	22	Seats with Tablet	\$ 11,300		\$ 2,400	\$350	\$375	\$14,425
2	Murphey Hall	204	AMST	27	Seats with Tablet	\$ 13,800		\$ 2,400	\$450	\$425	\$17,075
2	Murphey Hall	220	CLAS	20	Seats with Tablet	\$ 10,300		\$ 2,400	\$350	\$375	\$13,425
2	Murphey Hall	221	CLAS	14	Seats with Tablet	\$ 7,300		\$ 2,400	\$275	\$350	\$10,325
2	Murphey Hall	302	OUR	22	Seats with Tablet	\$ 11,300		\$ 2,400	\$375	\$400	\$14,475
2	Murphey Hall	314	OUR	23	Seats with Tablet	\$ 11,800		\$ 2,400	\$400	\$400	\$15,000
2	New East	301	PLAN	18	Seat with Table	\$ 4,800		\$ 2,400	\$425	\$425	\$8,050
				Total		\$ 721,950					\$1,125,655

Appendix II – Comprehensive Renovations

PROJECT COST ESTIMATES - ACTIVE LEARNING CLASSROOM IMPROVEMENTS				
Date Prepared: 3/1/2018				
These ballpark cost estimates are generally based on the scope of work for the Greenlaw 101 classroom renovations, plus other obvious improvements identified on a walk-through of the specific classrooms. They are not based on proposed room layouts - which are, as of this date, to be determined.				
Whole Room Renovations				
Components of the Project		Carroll 111	Gardner 07/08	Sitterson 014
Room Square Footage =		1877	4222	2384
				2128
Abatement		\$ -	\$ -	\$ -
Core Demolition & Construction (Scope of Work equivalent to Greenlaw 101)		\$ 438,096	\$ 247,376	\$ 220,812
Window Treatments		\$ -	\$ 9,700	\$ -
Additional Wall Demolition / Construction		\$ 10,100	\$ 4,908	\$ -
Additional Cost		\$ -	\$ -	\$ -
Additional HVAC Cost		\$ -	\$ 30,000	\$ -
Sub-Total Demolition & Construction Cost		\$ 975,906	\$ 609,470	\$ 476,316
Design, Project Management & Contract Administration		\$ 218,110	\$ 128,989	\$ 103,234
Sub-Total Abatement, Demolition, Construction, Design & Management Cost		\$1,194,017	\$ 738,459	\$ 579,550
Furniture Costs (Allowance) including Whiteboards		\$ 166,460	\$ 53,960	\$ 58,960
AV & IT Equipment (Allowance)		\$ 125,000	\$ 125,000	\$ 125,000
ADA Obligation 20% of Demo, Constr, Design & Management Cost		\$ 238,803	\$ 147,692	\$ 115,910
Sub-Total Project Cost (before Contingency)		\$1,724,280	\$ 1,065,111	\$ 879,420
Contingency 20% of Sub-Total Project Cost		\$ 344,856	\$ 213,022	\$ 175,884
TOTAL PROJECT COST		\$2,069,136	\$ 1,278,133	\$ 1,055,304