

UMKC Conservatory Students and Their Work: Research Findings

FOCUS ON ARCHITECTURAL PLANNING AND DESIGN FOR
UMKC'S DOWNTOWN CAMPUS FOR THE ARTS

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Executive Summary

The initiative for UMKC's Downtown Campus for the Arts presents a unique opportunity for radical change in Conservatory and Conservatory library spaces and services. To inform planning of the new campus and its library, a UMKC research team harnessed ethnographic methods to research UMKC Conservatory student needs. Ethnographic methods facilitate holistic examination of numerous aspects of the studied population by using open-ended tools to gather qualitative data.

The primary research method was a Fall 2014 photo elicitation study wherein current Conservatory students were instructed to take a photo for each of twenty prompts related to their daily lives as students and performing artists. Each student then discussed his or her own photos in a one-hour individual interview. This research was supplemented by structured brainstorming from music library student assistants; anecdotal observations' and formal co-viewing sessions where a team of music librarians and staff, Conservatory students, Conservatory staff, non-music librarians and staff, architects, and research team members collectively viewed interview videos and used them as a brainstorming springboard.

Researchers analyzed all gathered data to formulate the recommendations contained in this report, which focuses on aspects affecting architectural planning and design of the Downtown Campus. This report contains numerous recommendations to guide creation of spaces that will foster a vibrant artistic community and encompass aspects of library layout, study spaces for groups and individuals, practice and rehearsal spaces, adjacencies, classrooms, and facilitating access to spaces. Research findings which can be implemented in current library spaces or which primarily affect services (rather than spaces) are excluded from this report.

All recommendations are compiled in the Recommendations Summary, and the Recommendations Details section adds discussion and findings, including interview excerpts and photos. The Research Methodology section gives an overview of research methods and lists team members. UMKC's Institutional Review Board (IRB) approved the research protocol "UMKC Conservatory Students and Their Work."

Recommendations Summary

1. Library layout
 - a. Fixed (i.e. non-compact) publicly accessible shelving for scores
 - b. Tables and chairs near score shelving to lay out and examine scores, including oversize scores
 - c. Spaces optimized for quiet individual study
 - d. Spaces facilitating serendipitous discovery (e.g.: open group listening/viewing spaces, gathering spaces, displays), concentrated near library entrance
2. Study spaces
 - a. Quiet spaces
 - b. Loud spaces
 - c. Soundproof spaces for individuals
 - i. Equip with playback technology and large monitors (ideal for viewing video or scores)
 - ii. Locate some of these spaces near (but not necessarily in) the secured library space
 - d. Soundproof spaces for groups
 - i. Equip with playback technology and large monitors (ideal for viewing video or scores)
 - ii. Locate some of these spaces near (but not necessarily in) the secured library space
 - iii. Open and inviting, perhaps half-glass walls, to encourage natural gathering and encounters, but also with sufficient soundproofing
 - iv. Size: perhaps varied to accommodate either 4-8 or 8-12 people
3. Practice and rehearsal facilities
 - a. Adequate practice and rehearsal facilities provide fertile ground for growing an artistic community
 - b. Sufficient in amenities
 - i. stands
 - ii. absolute size
 - iii. sound proofing
 - iv. in-tune piano
 - v. mirror (placed to accommodate both standing and seated musicians)
 - vi. acoustics (Possibility: tunable/virtual acoustics rooms like those from [Wenger](#))
 - vii. recording features possibly via interactive practice software such as [SmartMusic](#) (perhaps only selected rooms)
 - viii. selected spaces equipped for specialized activities like reed work
 - c. Sufficient in number
 - d. Reservable via computerized scheduling system
 - e. Aesthetically pleasing
 - f. Casual social space nearby (perhaps equipped for discovering new music/dance)

4. Adjacencies
 - a. Locate library, study, practice, and computer lab space in proximity
 - i. Not co-mingled and not necessarily directly adjacent
 - ii. Will facilitate easy movement between areas, mixed use, and access to library resources and assistance
5. Classrooms
 - a. Include smaller (ca. under 25 students) classrooms
 - b. Investigate strategies for making larger classrooms more intimate
 - c. Consider lighting, particularly possibilities for natural light
6. Access to spaces
 - a. Include swipe card access to rooms
 - i. Facilitate automated permissions enforcement for room spaces.
 - ii. Interact with a room reservation system that would aid students and faculty in scheduling spaces for practices, rehearsals, study sessions, presentations, meetings, etc.

Recommendations Details

This section expands on the recommendations by including “Discussion and Findings” for each of the six main recommendation areas. The discussion and findings include student photographs¹ and transcribed interview excerpts.

1. Library layout

Recommendations

- a. Fixed (i.e. non-compact) publicly accessible shelving for scores
- b. Tables and chairs near score shelving to lay out and examine scores, including oversize scores
- c. Spaces optimized for quiet individual study
- d. Spaces facilitating serendipitous discovery (e.g.: open group listening/viewing spaces, gathering spaces, displays), concentrated near library entrance

Discussion and findings

Interacting with artistic works is central to the performing arts. Dancers and musicians must find out about (or “discover”) works, then obtain them, in order to interact with them. In many situations, multiple iterations of the work are eventually required: full scores, individual parts, recordings, videos, etc. The library has long served as a primary source for both discovering and obtaining music. Today’s students frequently use other sources, especially online, but still value the library particularly for its browsable score collection and for spaces to find and examine works either as a group or individually.

Students valued the hands-on, serendipitous experience of browsing library shelves for printed music, exemplified by a student who chose the “symphonic scores” section as “A place you like to go in the library.” [Figure 1] The interviewer prodded for details of the student’s activities and goals when visiting the symphonic scores section:

Interviewer: When you go back there to that section, just talk about what you do back there, like, you pull a bunch of scores off, you kind of flip through them, or, you have something in mind, how do you do that?

Subject: Yeah, sometimes I go back there and I just am perusing, am trying to find something that looks interesting. Other times I go back there and I’m looking for a very specific piece.

¹ All photographs in this report were taken by student subjects in this research study unless otherwise noted.

Figure 1: “A place you like to go in the library” (The symphonic scores section)
(Photo courtesy of UMKC library staff)



The student’s additional comment emphasizes the value placed on spontaneity and serendipity:

Subject: [If] I’m looking for something specific, I will look it up on the computer. However, otherwise, I’ll just kind of wander around. It’s like, “OK, it looks like I’m around scores for masses, so, ooh, I wonder if they have *Missa Solemnis* here.” And so- I just- it’ll kind of depend on what mood I’m in for the day.

Other sections of the interview made it clear the student was aware of internet sources like IMSLP² where Beethoven’s *Missa Solemnis* could have been obtained, yet the student still valued and used the library’s score collection because of the physical browsing experience and corresponding likelihood of serendipitous discovery.

The library’s scores are grouped by instrumentation and genre, and students were aware of and valued this feature:

² The “Internet Music Score Library Project,” also known as Petrucci Music Library. <http://imslp.org/>

Subject: The way things are organized in the music library, I think, is that it's organized by like sections and types of music. So, it's like all the woodwind quintets are in one area or something.

Composers and all students seeking contemporary music particularly valued the oversize score section, like this student who photographed the oversize score section as "A place you like to go in the library" and explained browsing for compositional ideas and inspiration. [Figure 2]

Subject: When I need new ideas, I just go to... this shelf, and randomly check the piece, and, like, ah-ha, maybe this one, this one, and bring them home and study.

Interviewer: And you go to this shelf, specifically, the oversize scores?

Subject: Yes, yes, yes, oversize, yeah. ... Big score can give me more ideas, because I can see the texture. You know, like, you know- Piano music can do that too, but, I prefer to see structure. Structure is very important. I can see the shape. Yeah, then I can, you know, pick, pick, pick, pick. Yeah.

Interviewer: So, is it- Because a lot of the scores in this area too are, maybe like 20th and 21st century composers.

Subject: Right, right.

Interviewer: Does that make this especially why you come here, or?

Subject: Yes. Yes, Yes. Because, I know Bach. I know Beethoven. ... I got some ideas from them already. But I don't know all of these composers. ...

Interviewer: Then do you check them out and take them home, or do you usually look at them in the library?

Subject: No, no, no. Just to look at them in the library. I have a piece of paper and then take notes. And then go back home.

Figure 2: “A place you like to go in the library” (The oversize scores section)



Because of the value of a physically browsable score collection, it is important the new Conservatory library includes sufficient space to shelve scores in publicly accessible (rather than staff-only) areas. Furthermore, score shelving should be stationary (not compact), to allow for extended browsing (rather than just quick in-and-out retrieval) and tables and chairs should be placed nearby to create a space to examine particular scores, including oversize scores, in depth.

Spaces for individual and group study are also needed in and near the library. Discussion of the location and characteristics of these spaces is found in the “Study spaces” recommendations, but the need is noted here because of its relevance to library layout.

2. Study spaces

Recommendations

- a. Quiet spaces
- b. Loud spaces
- c. Soundproof spaces for individuals
 - i. Equip with playback technology and large monitors (ideal for viewing video or scores)
 - ii. Locate some of these spaces near (but not necessarily in) the secured library space
- d. Soundproof spaces for groups
 - i. Equip with playback technology and large monitors (ideal for viewing video or scores)

- ii. Locate some of these spaces near (but not necessarily in) the secured library space
- iii. Open and inviting, perhaps half-glass walls, to encourage natural gathering and encounters, but also with sufficient soundproofing
- iv. Size: perhaps varied to accommodate either 4-8 or 8-12 people

Discussion and findings

Academic libraries today often provide an assortment of spaces to support different learning styles and types of work. In general, these spaces fall into two categories: “quiet” areas which are used by individuals who work best with minimal (or no!) activity or noise around them; and “loud” areas, which are used by groups and by individuals who work well with noise and activity surrounding them. Libraries may create spaces at finer gradations along the noise continuum, for example “semi-quiet” areas where quiet group collaboration is allowed and “ultimate quiet” rooms where absolutely no noise is allowed. In general, the quieter a space becomes, the less conducive it is to group work.

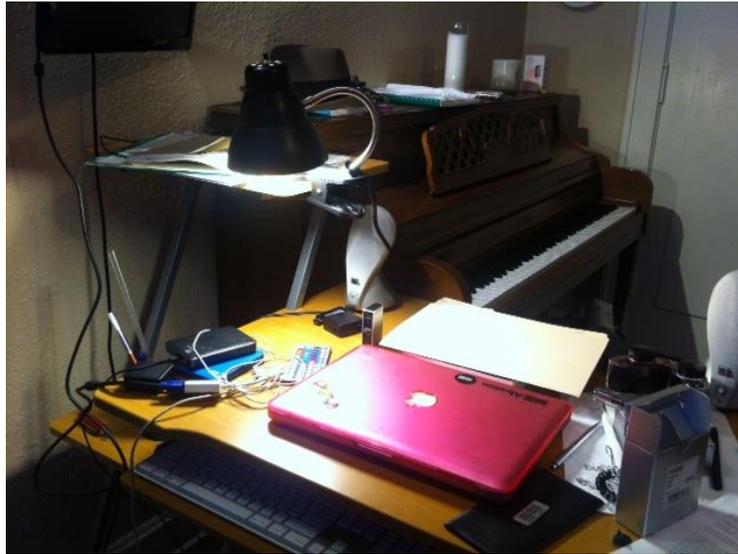
This research project confirmed music and dance students do, like students in general, value “quiet” and “loud” spaces. However, Conservatory students were more sensitive to noise levels (whether high or low) and the corresponding effects on their concentration and mood. In addition, students had an academic need to listen to music (i.e. make noise) but simultaneously focus and be free of other distractions, particularly other sounds. This discipline-specific factor resulted in a need for a third type of space, which researchers termed “soundproof” space. This report will focus first on standard “quiet” and “loud” spaces, then move on to the needs for the unique “soundproof” space, considering both individual and group study throughout.

Beginning with quiet spaces: most students need a space where they can block out distractions and “zone in” on a task at hand. For some students, this blocking of distractions requires quiet plus minimal surrounding activity. These students usually work either in their own living spaces or quiet study areas of a library. One student obviously preferred the distraction-free environment of a studio apartment with no roommates and closed windows, photographing it as “a place you feel most productive.” [Figure 3]

Interviewer: This is a place where you feel most productive... Tell me about this space. ...

Subject: Basically, it is my room. I work here most of time. Most of the day or at night. I just sit there.

Figure 3: “A place you feel most productive”



Another student, who shared a house/apartment with roommates, selected a secluded bedroom corner for intense study. [Figure 4]

Interviewer: This is a place where you study?

Subject: Yup. That's just the floor in front of my bed, to be honest. I just- somehow I just end up there when I'm studying for things because it's just- it's like even more isolated than the sofa area [a shared “living room” type space]. So, it's like, if I really need to focus on learning something that I've forgotten or getting ready for a test, or learning- doing something specific, I'll go there since it's really private and everything.

Figure 4: “A place where you study”



While these two students valued an area that was not only quiet but also physically isolated from other people, some students benefit from being in a group of quietly working people. One student valued the library for paper-writing (an individual activity), particularly the focus created by being around other similarly engaged people. However, the discipline-specific sensitivity to sound is obvious: the same student avoided UMKC's practice rooms, which might provide the same sense of being around others hard at work. The difference was due to the differences in these kinds of work and especially the need to focus on sound when practicing.

Subject: I have a computer at home but I find that I can get distracted easily. So, if I need to write something I'll come to the library to write that. ... I'll use the computers [in the library] because I find that I can focus more just in the library. Plus, I like libraries.

Interviewer: So you find that you can focus on writing a paper better in the library but your practicing works way better in your home.

Subject: Mmhmm.

Interviewer: Why- do you have any ideas of why that difference is?

Subject: I don't know. Just... I think that, like... like, in the library, everybody else is also putting their energy and their focus into [paper writing and similar activities.] And it's a lot easier for me to be able to be with the sounds of the library than it is to be able to be with the sounds in the practice room.

This student's comments also introduce musicians' particular sensitivity to sound. This sensitivity will be explored further in the discussion of "soundproof" spaces. For the present, the conclusion regarding quiet study spaces is clear: most students valued places where they could block out distractions. Therefore, quiet, low-distraction spaces should be included in new Conservatory and Conservatory library facilities.

The discussion now moves to loud spaces. A dance student expressed an almost textbook example of the type of group work loud areas facilitate, describing a group study session on Miller Nichols Library's first floor, a loud area optimized for group work.

Subject: This was studying for our... class, because [a large group of students] are required to take this specific [course]. There were like, eleven of us or something, so we filled out the table pretty good.

Interviewer: How did you guys all decide to study together, and like, plan and work that out?

Subject: Well, we needed to do it because our rehearsal schedules have been so crazy that we just haven't had a lot of time to work on them, and the fact that we

really didn't know what we were doing, so, we needed to- we- it like started, it was like me, and one of my friends were like, "hey, we need to study" and so then, more people got invited, and it was actually really nice to have such a big group of people all shouting- not shouting, *saying*- their opinions or ideas on- the different music that we had to dissect.

Interviewer: Did you, like from beginning of that session to the end, did it solve the concerns that you had? Did you figure everything out?

Subject: For the most part. When you have that many people together, it's hard to really stay on track, if you know what I mean, like, the distraction of, especially like Rocket Coffee [i.e. the Roobot Café] being right there. But no, I think we did pretty well. We got done what needed to be done, and it helped us feel more confident for our test that we had that following Monday. Yeah. Study sessions: highly recommended.

Loud spaces optimized for groups also provide a place for individuals who work best with activity and sound around them: the surrounding group activity supplies the white noise. Including some individual (but still generously-sized) furniture in loud study areas will optimize space usage because individuals can be present without monopolizing space that could be used by an entire group.

However, basic quiet and loud spaces do not, alone, meet Conservatory student needs, due to the aforementioned need to listen to music and heightened awareness of sound. A discussion of headphone use opens this exploration of Conservatory student needs that necessitate a third type of study space: "soundproof" areas.

Headphone use is common among students in all disciplines, with the headphones generally playing music to block other noise or create white noise. Students (again, in all disciplines) use headphones in both loud areas (to block out other noise) and in quiet areas (to create white noise without disturbing others.) Conservatory students in this study mirrored the general population in that some did, indeed use music to block noise or generally reduce distractions. However, the specific sensitivity to sound impacted the activity, particularly in that background music listening was usually differentiated from "study" music listening, and subjects who used music for background noise frequently chose music *not* in the style they primarily studied. For example, a classical musician preferred popular music in the background while writing or conducting research:

Subject: Especially when you're taking, like, theory classes and all you're doing is just sitting there and you're analyzing music. You need to- [Sighs] I don't care if people don't think that it's like, great music. It makes me so happy... the other day in class we were talking about, "Do you listen to music when you study?" And I was like, "I can't listen to opera. I can't listen to any kind of classical music when I study because I end up listening to that. But, if I'm listening to like, Juicy J, just rapping about nonsense, I'm just like, 'Yes! I can write this paper now!'"

A composer expressed a similar sentiment, but noted there were times when background music – in any genre – was not desired.

Subject: ...most of time, I listen to pop music. You know, because of the environment. You put your... earphones on... it's better to listen to pop music because classical music sometime, it is too soft, and it gets covered by the environment sound, so, yeah.

Interviewer: Do you listen to music while you're composing?

Subject: No, no, no, no, no.

Interviewer: OK.

Subject: Sometime, yes. Like, when I write the sketch, I can listen to pop music, but when I do like orchestration- no. ... because I need to hear.

Many individual listening needs can be met in loud and quiet areas through use of headphones, so long as the environment's volume is not *too* loud (overpowering the headphone sound) or *too* quiet (causing the headphone sound to disturb others nearby.) However, a few small rooms, soundproofed and equipped for individual listening, would provide optimized individual soundproof space. These small rooms would also serve students who prefer to work with both quiet *and* a sense of isolation, away from surrounding activity.

Group soundproof listening and viewing spaces are more challenging to design and locate. The primary purpose of group soundproof space is listening and viewing music and dance works in groups. Study subjects regularly mentioned group listening and viewing, though they did not currently do it in the library. However, students clearly value discovering new music and dance works as a group, and the library fits naturally into this activity. One student's description of listening in a home area with small, but "decent" speakers [Figure 5], makes the group aspect clear, while simultaneously emphasizing the serendipitous and community-building aspects: people listened because they were "around."

Interviewer: And when you listen to music, do you listen by yourself, or with- just your roommates-?

Subject: It depends on who is in the house. ... sometimes, if my roommates [other Conservatory students] are home, we'll listen to music. ... If it's just me, I'll listen to music.

Figure 5: “A great place to listen to music”



Students expressed interest in including listening spaces in the library. For example, when asked to describe a library or Conservatory space that would facilitate experiences similar to browsing and listening via a friend’s LP collection [Figure 6], a student suggested:

Figure 6:
“How you recently discovered
a piece of music that you like”



Subject: I think it would be neat if there was just like-something like this [i.e. friend’s LP collection]. Or maybe, like-... it might be cool to have a list of everything. But, also... I think that’s a lot easier to be curious if you can touch and feel and look and see exactly what it is. And then you can do that rather than having- “Oh, okay. I need to go to the desk and ask for this record and then I can go listen to it.” You know. So, that might be cool. Maybe it would be cool if there was a listening space with just comfy chairs and headphones or something like that. They could plug it in. And also, records aren’t something that we get to see every day these days, you know.

The subject went on to explain how such a space could be used by groups as well as individuals. This would help grow an artistic community centered on music and dance works.

Interviewer: Is this something you can envision having groups of people doing?

Subject: Yeah... it'd be kind of cool... a couple times when my quintet was over- a couple friends like, were like, "Oh yeah. Go. Let's find something to listen to." And just go listen.

A dancer mentioned similar activities, but centered on dance videos rather than music recordings:

Subject: Well, me and my best friend, we... go and she has like, videos of like, the Royal Ballet, or ABT [American Ballet Theatre] or PNB [Pacific Northwest Ballet] performing, like, all different ballets that she's purchased, and so, I would say, almost every Saturday night, go over there, we'll eat, like, a rotini or something and we'll basically just watch the ballet and critique it, and basically just be loud and obnoxious dancers. (Laughter).

The dancer explained how such a library space might be used:

Interviewer: If there was a place in the library, the new library... that you could watch some of this, would it be like a home theatre setup, I mean- what would it- would it be a personal place, just for you to watch?

Subject: I- both, I mean, if we're talking- I would say, like, a personal place that you could do it, or even like, a room, with just like a nice- you know, doesn't have be too big, like even a 40" TV, just like- with some beanbags on the floor, or, even chairs (laughs). Yeah, it would be fine. Like I would- I know we would utilize it, because it's easier than us all sitting on top of each other in the dorm room.

The challenges of creating soundproof space for communal listening space are clear in another student's explanation:

Interviewer: If there was a place on campus that had good speakers... available to you- what space would they be in?

Subject: I don't really know, to be honest. I don't really know where it would be acceptable to just have loud noise playing. I mean, if there were, like, a magical room in the library, or in the music building somewhere that uses space to just listen to music, that'd be pretty cool.

Interviewer: Like a sound-proof room or something?

Subject: Yeah. I mean, I would think that would be excellent.

The library does currently provide one group listening/viewing room seating 12-15 people (room G1 in the Miller Nichols Library), but for several reasons, it is not an optimal space. The space is not open and inviting, but rather located behind a closed door. It is only open by reservation via direct contact with Music/Media Library staff. Finally, it is not soundproof.

In creating soundproof spaces for groups, care must be taken to balance seclusion (which promotes focus) and openness (which promotes serendipity and artistic community.) Ideally, the Conservatory should have multiple soundproof spaces for groups, with varying amounts of equipment, seclusion, and soundproofing. Some spaces should be open to facilitate informal, serendipitous encounters. One student's photograph of "a place where you socialize" suggests possible characteristics of such an open area. [Figure 7]

Subject: So, this is the main lobby at the PAC [Olson Performing Arts Center]. ... This is where most of the people in the Conservatory end up hanging out or something. Usually, before and after rehearsals since rehearsals are in the PAC behind the Recital Hall. ...

Interviewer: So you socialize here as well?

Subject: Yup, like after rehearsals and stuff, or before rehearsals I'll be there.

Interviewer: Do you meet up with your friends or do you meet any old- any students that happen to be there?

Subject: Usually, it's just whoever is there. But, you can be pretty certain that certain people will be there [by consulting the schedule of who is playing on which pieces.] ...

Interviewer: What's that? Is a TV playing there? Or a giant sign, or something?

Subject: Yeah. ... [It] shows an event list of everything that's happening. So... To be honest, I'm not really certain why but, sometimes it's useful because you'll see something and you're like, "I had no idea. You know, Berlin Philharmonic Quartet is going to be here. What?" So you can go and you'll see some concerts you're interested in or something.

Figure 7: “A place where you socialize”



Carefully placed and thoughtfully equipped gathering spaces are a strong opportunity for creating an artistic community. Strategically locate such spaces in natural gathering areas, and equip them with tools for serendipitous discovery. A large, perhaps partially interactive screen could be used to feature resources, and audio could be accessed by plugging in or a wireless connection.

Additionally, small study spaces tucked into corners and hallways throughout the building could serve some casual needs for listening, as well as group and semi-quiet individual study. More fully equipped, reservable seminar rooms would include large monitors, speakers, and listening and viewing equipment for extended, focused listening and viewing. Equipping practice rooms, rehearsal spaces, and classrooms with monitors/projectors and playback equipment will facilitate multi-use possibilities, as well as incorporation of listening and viewing into primary activities of those spaces. Locate some of these spaces in or near the library, to facilitate access to the library’s audio and video collections.

3. Practice and rehearsal facilities

Recommendations

- a. Adequate practice and rehearsal facilities provide fertile ground for growing an artistic community
- b. Sufficient in amenities
 - i. stands
 - ii. absolute size
 - iii. sound proofing
 - iv. in-tune piano
 - v. mirror (placed to accommodate both standing and seated musicians)
 - vi. acoustics (Possibility: tunable/virtual acoustics rooms like those from [Wenger](#))

- vii. recording features, possibly via interactive practice software such as [SmartMusic](#) (perhaps only selected rooms)
- viii. selected spaces equipped for specialized activities like reed work
- c. Sufficient in number
- d. Reservable via computerized scheduling system
- e. Aesthetically pleasing
- f. Casual social space nearby (perhaps equipped for discovering new music/dance)

Discussion and findings

Music and dance students spend many hours practicing and rehearsing, so it is not surprising that rehearsal and practice activities came up throughout the interviews, even outside the prompt “A place you practice or rehearse.” This discussion will focus on the spaces subjects discussed most: individual practice rooms, chamber rehearsal spaces, and dance studios. Note that large ensemble spaces are, therefore, only addressed minimally in this report.

The Conservatory’s current lack of adequate practice and rehearsal spaces is already well-documented. This research reinforced the pervasiveness and ramifications of such deficiencies. Of particular note: no music student photographed or mentioned an on-campus practice space they liked, except two graduate students who benefitted from practicing in faculty studios. While the appeal of faculty studios was partially acoustics and larger spaces, the more important factor seemed to be psychological benefits of concentration from being in their teacher’s space:

Interviewer: What’s the difference between your teacher’s studio and any practice room? They have the stand for you or-?

Subject: Well, in the studio, it’s just, a lot more private. And, it’s just like an office, so. And also, it’s just like my teacher’s studio so I feel like kind of a teacher, you know? [Laughs]

The other student’s explanation is strikingly similar:

Subject: It’s nice to practice in the same room where your teacher- like, you have your lesson in there and she’s, you know, teaching you and telling you all of the awesome things you’re supposed to do. And then, the fact that we can later on, throughout the day- she’s given us permission to practice in there- it’s kind of- it’s really nice because you feel really focused because you’re like, “Okay, this is her studio. She might have secret cameras that, you know, can tell if I’m messing up or something.”³

³ The student’s tone of voice here and general style of speech throughout the interview made it apparent the student was not actually concerned about being spied on, but speaking figuratively to explain the psychological benefits.

All students noted numerous problems with campus practice and rehearsal spaces, including:

- extremely inadequate soundproofing
- insufficient number of practice rooms (i.e. room not available when student is ready to practice)
- “dungeon”-like feel of practice rooms
- unpleasant aesthetics inside practice rooms
- size/acoustics inside practice rooms
- out-of-tune pianos
- lack of stands
- lack of correctly placed and sized mirrors (place mirrors to accommodate both seated and standing musicians; consider placement in relation to piano for vocalists simultaneously playing and singing)
- lack of specialized facilities for activities like reed work
- buzzing lights in ensemble rehearsal rooms
- small, heavily-booked dance studios

Instead of using these spaces, students went elsewhere. Figure 8 shows a chamber rehearsal in a stand-less campus acting studio which was clearly not designed for music rehearsal.

Figure 8: “A place where you practice/rehearse”



More often, students went off campus and used living spaces such as their houses, apartments, and dorms. This worked best when a group of musicians shared living quarters, with residents co-tolerating practice noise even at late or early hours. Similarly, dance students waited to late hours of the night to use otherwise fully booked dance studios. In the end, students did not let practice and rehearsal space challenges interfere with their endeavors to create great art. Yet, the deficiencies added unneeded stress and frustration to student lives. Furthermore, the need to use off-campus spaces hindered the development of an artistic community, a fact particularly obvious in this student’s comments:

Subject: A lot of the time it's really hard to find a practice room because there's just not very many and there's a lot of music people. You know? So, I just cut out the uncertainty and just go home. [Laughs] Which, I mean- and also, another thing is, I find that I- like- I would probably want to spend more time in the music building if I felt like there was a little bit more sensitive community within the Conservatory. I don't really feel that. I feel like, kind of, everybody just goes to class and is just like, "Hey," and then just leaves.

Interviewer: Is there anything that we could do in a building or space that would help foster that community?

Subject: I don't know. Maybe have- to me the practice rooms kind of- like that hallway- kind of feels a little bit dungeon-like. So, maybe have some more open space within that area.

Interviewer: Near the practice rooms- for socializing?

Subject: Yeah. Yeah, yeah, yeah. And, like, yeah. And also- I just- they're just, like, really boxy and small and you can- either there's no chair, there's no stand, or there's neither. [Laughs] Or, there's no practice room available.

The student contrasted UMKC's practice spaces with facilities the student used regularly at a previous institution (The University of Iowa), speaking positively of that experience despite the institution's music program spaces being dispersed among multiple locations.

Subject: I went to Iowa for my undergrad- and, they- despite the fact that they had four music buildings because there was a flood and they built a new music building- I really liked the practice rooms there because they were way more sound-proof. And, you could also, like- you could- there were built-in recording systems in the practice rooms.

Interviewer: Really?

Subject: Yeah. So, you could just press a button and then record yourself and listen to it. They were, really- it was just really loud. And also, you can change the reverb in the room. So, that's kind of cool, too. So, I don't know...

Recording features in various formats, such as built into [Wenger's practice rooms](#) which also feature tunable/virtual acoustics, or as part of a comprehensive interactive practice software like [SmartMusic](#).

Building on the student's comments about community, the interviewer proposed activities specifically designed for building community, but the subject was lukewarm to the idea:

Interviewer: [Does the Conservatory] have, like, social mixer kind of things there?

Subject: Not that I know of, really.

Interviewer: Would that be something that would be appealing?

Subject: Yeah. Maybe. I'm not sure.

Despite the student's unawareness of them, the Conservatory does, indeed, sponsor specifically social activities, and these have value. However, the student's responses highlight the fact that spaces encouraging artists to gather and linger over their artistic work are powerful catalysts for creating an artistic community.

Though practicing is not a "quiet" activity, students desired isolation and the ability to focus in practice spaces. These requirements are actually very similar to those for individual quiet study spaces, except that the occupant is not quiet! One student explained:

Interviewer: Okay. Um, so if we were designing an ideal practice room for you, tell me what would be in it and what you would like from top to bottom. ...

Subject: Oh! Doors without windows. That might be a safety hazard or something but, I know that you cannot completely soundproof a practice room. But, I do not like practicing and people walking by and being like, "Oh, she just sang that note wrong."

While in-door windows are probably advisable for safety and security, the concept of creating a space conducive to some degree of privacy and "getting in the zone" holds. This is particularly relevant regarding location of social space near practice facilities. The social space should be convenient but not, for example, a central lobby with practice rooms lining the walls. This space should facilitate refreshing breaks from practice, and might be equipped with listening and viewing equipment which could facilitate both clearly defined listening tied to practice activity and serendipitous discovery. It could also include a monitor showing available and scheduled practice rooms, tied to a room reservation system discussed further in below in "Access to spaces/room reservation system."

4. Adjacencies

Recommendations

- a. Locate library, study, practice, and computer lab space in proximity
 - i. Not co-mingled and not necessarily directly adjacent
 - ii. Will facilitate easy movement between areas, mixed use, and access to library resources and assistance

Discussion and findings

Students regularly mentioned a need to get in a “zone” for various activities, especially practice and study. More extensive description of what facilitates “getting in the zone” for various students is contained in sections on study spaces and on practice and rehearsal facilities. Students also regularly mentioned the desire for community and how it is often created around works of art, as discussed in the library layout section’s exploration of serendipity and browsing. When spaces are optimized for particular activities while simultaneously facilitating serendipity, numerous benefits arise, especially greater productivity and creation of community.

Locating library, study, and practice spaces in proximity will facilitate mixed use of the spaces as well as easy movement between the spaces. Soundproofing considerations suggest the spaces be not intermingled but nearby. Additionally, locate a general use computer lab nearby to further facilitate these activities. At a future time when computer labs become obsolete, the space can be easily repurposed as a place for students to work on their own devices. Specifically, the general use computer lab should be placed directly adjacent to (and accessible from) the library to create efficiencies of staffing and service, as cross-trained student assistants provide basic assistance and monitoring for both spaces.

5. Classrooms

Recommendations

- a. Include smaller (ca. under 25 students) classrooms
- b. Investigate strategies for making larger classrooms more intimate
- c. Consider lighting, particularly possibilities for natural light

Discussion and findings

The photo prompt “a classroom you like” highlighted the excellent learning environment UMKC faculty are creating despite suboptimal spaces. Students generally liked classes for reasons other than the physical classroom, usually subject matter or teaching style. In fact, several students noted physical space problems in their self-selected “liked” classrooms, such as this excerpt from a student’s discussion of “a classroom you like”; the room being described is the classroom adjacent to the second floor computer lab in Grant Hall.

Subject: [Laughs] It does get a little bit annoying because there are the computers that are all around. So, and there’s just too many chairs, desks in the room.

Interviewer: Yeah, I see they’re like these standard desk-type set-ups.

Subject: ... There's 14 of us in the class. So, there's probably, like, 25 of those chairs. And the room is way too small to have that many [people]. ... Yeah. I mean, maybe not even 25. I don't know. There's too many chairs. And so, they just get, like, pushed out of the way. And the chairs are small together so- they're like for middle schoolers. We are all in college or graduate school. We are not that small.

Despite the predominance of comments on teaching style and content, two physical features did emerge: classroom size and lighting. All three undergraduates photographed small (less than 25 student) classrooms and noted this aspect when explaining their choice of classroom. The graduate students likewise selected small classrooms, but didn't note the fact, likely because graduate classes are overall smaller in size. As one student put it: [Figure 9]

Subject: My Muse classroom is huge- it's in the education building so it's kind of big, it's more like a lecture hall or something, where there's like, 150 or 200 seats, and it just doesn't feel very personal with the teacher, so that's why I like my Discourse class is because we're literally having a conversation with our teacher. And, I don't know if it's just with our teacher- I really love our teacher. But she always incorporates our feedback and values what we say. And I like that it's just, up close and personal and I'm not, you know, like six rows back in a sea of people that the teachers see.

Interviewer: Is there anything about the setup of this classroom that makes that work really well?

Subject: Ummm... I don't think so. I think it's more the person teaching it rather than the classroom, just because she always makes sure she makes eye contact, it's so easy 'cause it's a small studio- studio!- room. (Laughs) I really enjoy this Discourse class.

Figure 9: "A classroom that you like"



While eliminating large classes entirely is probably not feasible, it is reasonable to endeavor to provide every student with opportunities to experience some smaller classrooms. In addition, the architectural team might investigate strategies to make larger lecture halls seem more intimate, and faculty might consider methods to facilitate more personal interaction in large lecture classes.

In addition to class size, students often commented on classroom lighting and valued natural light, or, in its absence, bright artificial light. Though subjects did not mention it, care should be taken that “bright” artificial light does not become overly bright or harsh. Three students noted a preference for natural light or windows in classrooms, and a fourth expressed a preference for a “bright” dance studio and particularly the value of bright lighting in preventing drowsiness during early morning rehearsals. For one student, a window was the first thing that came to mind when explaining what was good about a classroom, even though the student had previously expressed a preference for an absence of windows in a living space. [Figure 10]

Interviewer: [Is there anything] really good about the way this classroom is set up, that makes this class work well?

Student: No, but I like the window.

Interviewer: OK. I noticed in your room [where you live], ...it looks like you don't have any windows.

Student: I do have windows [in my room], but most of the time, I close it.... When I work, I prefer to work in the... dark, but classroom should be brighter. Otherwise you can fall asleep.

Figure 10: “A classroom that you like”



Another student mentioned both a small class size and natural lighting as highlights of a favorite classroom. [Figure 11]

Subject: Now, you can't really see it because the day I took the picture it was all cloudy and stuff. But, normally when it's sunny, this classroom is really, really nicely lit and everything. And, it's not really big-it's kind of small-ish- so, you don't get the sense that you're completely lost in this giant... like, coliseum thing with 10 million other people and stuff.

Figure 11: “A classroom that you like”



6. Access to spaces/room reservation system

Recommendations

- a. Include swipe card access to rooms
 - i. Facilitate automated permissions enforcement for room spaces.
 - ii. Interact with a room reservation system that would aid students and faculty in scheduling spaces for practices, rehearsals, study sessions, presentations, meetings, etc.

Discussion and findings

This recommendation is related to previously discussed problems with finding practice and rehearsal spaces, as well as observations outside the study on difficulties students and faculty have in finding and reserving spaces for group study sessions, special lectures, thesis defenses, student group meetings, rehearsals, and practice sessions. An increase in available space on the Downtown Campus will do much to address this problem, but a

computerized reservation system would facilitate maximization of space, make planning easier, and streamline processes for reserving rooms and for accessing reserved spaces.

For example, a computerized reservation system could allow students to see availability of spaces and automatically reserve and then access spaces according to their assigned permissions. They could view room schedules online, including via smart phones or possibly a few touch screens throughout the building. For spaces not currently using reservations systems (such as practice rooms), adding a reservation/scheduling system would allow students to plan their time in advance. For spaces currently using reservation or controlled access (monitor or Conservatory staff member schedules and lets people in) a reservation system would provide instantaneous, around-the-clock schedule information, and access to spaces without the need to track down an on-site monitor.

For architectural/building planning purposes, the most important aspect is to budget and plan for swipe card access systems.

Research Methodology

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Research Methodology

This section is an overview of research methods used to gather the data for this report. The report is primarily based upon data created in the UMKC IRB-approved research study “UMKC Conservatory Students and Their Work.”

The initiative for UMKC’s Downtown Campus for the Arts presents a unique opportunity for radical change in Conservatory and Conservatory library spaces and services. To inform planning of the new campus and its library, a UMKC research team harnessed ethnographic methods to research UMKC Conservatory student needs. Ethnographic methods facilitate holistic examination of numerous aspects of the studied population by using open-ended tools to gather qualitative data.

This research study used an ethnographic method termed “photo elicitation” and was built around twenty photo prompts, some adopted or adapted from previous photo elicitation studies, especially studies at the University of Rochester libraries.⁴ The

⁴ Judi Briden, “Photo Surveys: Eliciting More Than You Knew to Ask For,” in *Studying Students: The Undergraduate Research Project at the University of Rochester*, ed. Nancy Fried Foster and Susan Gibbons (Chicago: Association of College and Research Libraries, 2007), 41; Judi Briden and Sarada George, “Picture My Work,” in *Studying Students: A Second Look*, ed. Nancy Fried Foster (Chicago: Association of College and Research Libraries, 2013), 43. Note that the University of Rochester studies occurred on their main campus and thus excluded the Eastman School of Music and Sibley Music Library.

complete photo prompt list appears on page 31. The research team carefully crafted a scope broader than library activities. Though prompts were designed to elicit information on work and activities the library could or should support, only two prompts (“A place you like to go in the library” and “Something every Conservatory freshman should know about the library”) explicitly mentioned the library. Many prompts targeted performing arts-specific activities, especially practice, rehearsal, and other encounters with music and dance works. The study even included a few prompts designed primarily to whet creative juices, like “Something weird” and “Your favorite part of the day.” To protect privacy of both subjects and other people, the study excluded prompts likely to elicit photos of people, and researchers explicitly instructed subjects not to include identifiable people in their photos.

Because informing planning for UMKC’s future Downtown Campus for the Arts was this study’s primary goal, the subject population consisted of current students in UMKC’s Conservatory of Music and Dance. All current Conservatory students were invited via email to volunteer. Additional recruitment methods attempted to increase volunteer response: an email to all Conservatory faculty, flyers posted in library and Conservatory spaces, social media posts, and engagement with the Conservatory Student Association. As an incentive, selected subjects received a twenty-dollar Amazon.com gift card upon successful study completion.

Due to this research’s intensive and qualitative nature, the study included only six subjects. This sample size may seem small, but it is of a comparable magnitude to sample sizes of previous photo elicitation studies, which ranged from five to thirty-two subjects, with most consisting of eight to twelve subjects.⁵ When planning the study, expanding the sample size to twelve subjects was left as an open possibility, but in the end the study was considered complete after the initial six subjects because even with that sample size, major themes became clear by appearing with regular frequency.

Furthermore the team employed methods to informally “expand” the sample size: a separate non-random, informal exercise with ten Conservatory students,⁶ input from the ten-member co-viewing group, and input gathered informally but systematically from faculty and students in other parts of the architectural planning process.⁷

⁵ Specific sample sizes of previous academic library photo elicitation studies are as follows, ordered from smallest to largest: 5 subjects (Lin, 2006), iv; 8 subjects (Briden, 2007), 42; 10 subjects (Briden and George, 2013), 42; 10 subjects (Delcore, et al., 2009), 10; 12 subjects (Keller, 2012), 1; 32 subjects (Gabridge, Gaskell, and Stout, 2008), 510. Hobbs and Klare (2010) did not report their sample size.

⁶ As a pre-planning phase of this research, ten music library student assistants individually and informally brainstormed on the prompt “You’re planning the ideal library for YOU. Describe it. What is it like? What does it have?” While not part of the formal study, similar themes emerged in collating and analyzing the 108 ideas brainstormed. There was no overlap between members of this informal group and six study subjects.

⁷ The architectural team conducted various surveys and focus group sessions, sharing themes of their findings with building committee members, including the research team’s principal investigator. As with the pre-planning phase brainstorming, the results were not statistically valid nor shared in their entirety with the research team, but the themes were strikingly similar to those uncovered in this formal study.

Nonetheless, given the small sample, it was important to ensure the project included students with a wide range of academic foci, so volunteers were stratified in two ways before sampling. Stratified sampling divides the population into sub-populations, or strata, thus ensuring that important variables (in this study, academic foci) are represented. The first stratification was area of study. Conservatory programs were grouped into six areas of study: vocal and choral; instrumental; dance; composition; musicology or music theory; and music therapy or music education. The second stratification was degree program, with degrees grouped into two categories: undergraduate and graduate. Despite broad recruiting, there were no volunteers from musicology/music theory, the Conservatory's smallest area of study. To reach the desired study size of six subjects, two subjects (one graduate, one undergraduate) were selected from volunteers representing instrumental performance, the Conservatory's largest area of study.

At the end of the recruitment period, the principal investigator selected volunteers. The volunteers were grouped by area of study, then numbered. A random number generator was used to select a subject from each area of study. In order to simultaneously satisfy the second stratification (degree program), once three subjects were selected in a single degree program group (i.e. graduate or undergraduate), all remaining volunteers in that degree program group became ineligible for selection as subjects.

Each subject met with the principal investigator to discuss the study, provide consent, receive a photo prompt list and instructions, and schedule a follow-up interview one to three weeks in the future.

The interviews lasted approximately one hour and were conducted by two interviewers with the subject in a library conference room. Morae⁸ usability testing software facilitated video and audio capture of the subject and interviewers plus screen capture of the computer used to view the photos, including recorded mouse movements. The main body of the interview was intentionally unscripted and open-ended, with initial questions along the lines of: "What is this?"; "Tell me about [this detail or aspect of the picture]"; or "Tell me how this photo represents [the photo prompt]." Follow-up questions were based on subject responses, and the conversation was allowed to flow naturally. Indeed, some of the most interesting interview sections came when discussion had veered far from the original photo.

The research team transcribed the interviews, then began data analysis via two complementary ethnographic analysis methods. The first method was group video co-viewing. Co-viewing was not a comprehensive analysis but an initial exploration which used the interviews as a tool for group observation and brainstorming. The ten co-viewers represented a broad range of perspectives, including: music librarians and staff, Conservatory students, Conservatory staff, non-music librarians and staff, architects, and research team members.

⁸ Morae usability testing software facilitates simultaneous video/audio and screen capture. It also includes tools for recording and tracking facial expressions and eye movements, data analysis, and real-time remote observation, though these were not used for the present research.

Co-viewers came together for six co-viewing sessions with four to six co-viewers watching each interview. The principal investigator provided co-viewers with a transcript to read in advance and pre-selected interview sections to co-view, focusing on conversations most closely related to study aims. These pre-selections were adjusted “on-the-fly” during co-viewing based on time constraints and co-viewer requests. In the end, approximately thirty minutes of the interview video were viewed in each two-hour co-viewing session. Any co-viewer could stop the video at any time and comment. Discussion would then continue, lightly facilitated by the principal investigator, until a natural breaking point was reached. Co-viewers collectively recorded discussion highlights in a real-time shared document. Broadly, discussions centered on: recurring themes, problems, things that worked well, other points of interest, and free-form brainstorming. When a subject’s successes occurred outside library spaces and services, co-viewers pondered whether similar solutions could or should be incorporated into library spaces and services.

The second data analysis method deepened the initial co-viewing exploration. The research team systematically analyzed all six interviews, using NVivo⁹ qualitative data analysis software to code the transcripts for recurring themes and topics, including those preliminarily identified in the co-viewing sessions. Co-viewing themes became the beginning of a controlled vocabulary used for coding, allowing the research team to comprehensively identify and track recurring themes.

While not part of the formal research study, the research team supplemented their investigations with structured brainstorming from Music/Media Library student assistants (all of whom are also Conservatory students), anecdotal observations, and informal conversations especially with Conservatory faculty and students. This informally gathered data is included in this report when it enhances or expands on findings from the formal research study.

⁹ NVivo is a tool especially for analyzing unstructured data. It facilitates organization and analysis, providing tools to create a hierarchical coding system that can evolve and change as the research progresses, then facilitating collation and analysis of instances of the themes. It also includes tools for automated coding, sharing, and exporting and importing data.

Photo Prompt List

Students participating as subjects in the research study were asked to take a photograph for each of the twenty prompts below.

1. A place where you feel most productive
2. A place where you practice/rehearse
3. Something weird
4. Stuff you carry with you every day
5. Your music collection
6. Your desk
7. How you stay organized
8. A place where you socialize
9. A great place to listen to music
10. A place where you study
11. A classroom you like
12. A piece of music that you like
13. A place you like to go to in the library
14. Cool technology
15. Something every Conservatory freshman should know about the library
16. A place you feel lost
17. How you recently discovered a piece of music that you like
18. Something you can't live without
19. The night before a big assignment is due
20. Your favorite part of the day