

Journal of Performing Arts Leadership in Higher Education

Volume II
Fall 2011

Laurence Kaptain, co-editor
Mark Reimer, co-editor

ISSN 2151-2744 (online)
ISSN 2157-6874 (print)

Christopher Newport University
Newport News, Virginia

The Journal of Performing Arts Leadership in Higher Education is a recognized academic journal published by Christopher Newport University, a public liberal arts institution in Newport News, Virginia. Copyright to each published article is owned jointly by the Rector and Visitors of Christopher Newport University and the author(s) of the article.

Brian McGuire, copy editor
J. Courtney Michel, layout

Editorial Board

(Fall 2009 through Spring 2012)

Seth Beckman, Florida State University

Robert Blocker, Yale University

Alyson Colwell-Waber, Meredith College

Robert Cutietta, University of Southern California

Nick Erickson, Louisiana State University

John W. Frick, University of Virginia

Mary Pat Henry, University of Missouri-Kansas City

Laurence Kaptain, Louisiana State University (co-editor)

Karl Kramer, University of Illinois

Douglas Lowry, University of Rochester

Jack Megan, Harvard University

Jonathan Michaelsen, Indiana University

Toni-Marie Montgomery, Northwestern University

Mellasenah Y. Morris, The John Hopkins University

Mark U. Reimer, Christopher Newport University (co-editor)

James C. Scott, University of North Texas

David H. Stull, Oberlin College

James Undercofler, Drexel University

Frank Weinstock, University of Cincinnati

Peter Witte, University of Missouri-Kansas City

Mission

The Journal of Performing Arts Leadership in Higher Education is a peer-reviewed journal dedicated to the enrichment of leadership in the performing arts in higher education.

Goals

1. To promote scholarship applicable to performing arts leadership.
2. To provide juried research in the field of performing arts leadership.
3. To disseminate information, ideas and experiences in performing arts leadership.

Table of Contents

PEER-REVIEWED ARTICLES

Business Law for Musicians:

An Overview of Legal Topics for Music Students

Ronnie Cohen 4

A University Lawyer’s Perspective on Study Abroad Trips

William Thro 13

INVITED ARTICLES FROM THE INDUSTRY

Dollars and Sense: Pianos in the Music Unit

Robert Weirich 20

Facilities That Deliver: Reputation, Enrollment, Profit, Community Relations

Rob Reis, Deborah Marquardt, Mark Reimer 26

Streaming Musical Performances at Institutions of Higher Education:

A Practical Look at the Benefits, Requirements and Implementation

Ryan Ermeling 36

Making Practice Perfect: Effective Music Practice Rooms

Denny Meyer 44

Submission Guidelines 51

**BUSINESS LAW FOR MUSICIANS:
AN OVERVIEW OF LEGAL TOPICS FOR
MUSIC STUDENTS**

“*[T]he quartet [was] a business whose ‘product was their musical performances,’*”
Judge Timothy Patrick O’Reilly, of the Court of Common Pleas of
Allegheny County, Pa., in the Audubon Quartet litigation¹

In the Fall 2010 volume of this journal Dean Douglas Lowry wrote that “[we] want our faculty artists and students and graduates to create significant, inspiring art, and hopefully have some prospect for gainful employment. And we bear some responsibility for giving this condition serious thought and action.”² One part of meeting this responsibility is to ensure that our students are equipped with some basic knowledge about the business of music. Schools have taken a number of approaches in this regard. Professor Gary Beckman wrote in the *Journal of Arts Management, Law and Society* that

Partnerships between arts and business schools are common, especially at universities with strong entrepreneurship programs. The primary role played by business schools has been to assist with program development and provide curricular content. Leaders of many business programs expressed an eagerness to support their arts colleagues’ efforts; for example, some are willing to create specialized business courses for arts students.³

The question for educators is this: what are the most significant business issues with which our music students need to be familiar in order to give them the confidence and knowledge they will need to negotiate their way through the opportunities and challenges of their careers?⁴ It is axiomatic that the music industry is undergoing great change. One commentator expressed it as follows:

Not long ago, the music industry was closed to those outside “the know” who possessed the limited knowledge, and even more limited financing, required for access to and success within the music business....[n]ow the independent artist has become the record company and enjoys digital access to the world of music distribution where such access previously did not exist. The natural result of this is that anyone with a glimmer of talent, appropriate recording software, an Internet connection, and a little ingenuity can become a star. Thus, the law of natural selection could take over and allow only the fittest, or at the very least the most clever or talented, artists to survive.⁵

While the causes and historical trends of these changes are beyond the scope of this article, a thumbnail description is offered by Ashlye Keaton, entertainment attorney and co-founder of Entertainment Law Legal Assistance Project, and Jerry Goolsby, eminent scholar of music industry studies at Loyola University New Orleans. They identify three key causes of the “demise of a once great industry”: (1) rejection of technology, (2) suing your customers and (3) corruption and ethical challenges.⁶ In light of this rapidly evolving landscape, what tools can an undergraduate course provide to music students? Three main areas can serve as the foundation for a working knowledge of the business of music: copyrights, contracts and business organizations.

Copyright

Student composers need to identify what constitutes a copyrightable piece of music. Can it be the tick-tock sound of a clock?⁷ Are 4.33 minutes of silence protected by copyright?⁸ Additionally, student composers should note the cautionary tale of George Harrison, whose infringement of the song, “He’s So Fine,” was determined by the court to be subconscious, but nevertheless, actionable.⁹

From the plethora of issues arising out of the clash between copyright protection and new technologies, certain issues are of particular importance to students and new artists. While much has been written about music piracy and illegal downloading by end-users, less attention has been given to the issues of the new and independent musician seeking to protect his or her own work from misappropriation by music consumers and other artists. Historically, the elements of a copyright infringement action were ownership of the copyright to the original work by the plaintiff, access to that work by the defendant, and substantial similarity between the original work and the alleged copy.¹⁰ The access requirement has lost much of its importance as access to digitized music can be assumed for anyone with an Internet connection.¹¹ Thus, the central focus of an infringement claim is the similarity between the works. The determination of what constitutes a substantially similar work includes both the quantity and quality of the alleged copy. This determination is normally a task for the jury as it requires the application of the reasonable person standard to the facts of the particular case. Thus, there is no magic number of notes or bars that can be used to determine whether the copying is substantial.

Digital technologies have led to a huge increase in sampling and sampling has been the subject of much litigation often, but not exclusively, in the context of hip-hop music.¹² The risks associated with sampling without copyright clearance include potential infringement liability and forfeiture of income generated from the offending composition. Whether sampling constitutes infringement may depend on whether the copy is substantially similar, but also may depend on whether the allegedly infringing work transforms the original, and thus avails itself of a fair use defense to copyright infringement.¹³

An understanding of fair use and its limitations are essential to an understanding of copyright law. The basic elements of the fair use defense to a charge that a party copied a work without permission are determined by reference to four factors. The first is the nature of the work that was allegedly copied, that is, to what extent that work is protected. For example, a piece of classical music enjoys broader protection than a history textbook because the amount of creativity required to create the former is greater than the creativity required to organize and describe the historical facts contained in the latter. The second factor is the amount and substantiality of the copying. While substantial similarity must be satisfied for a finding of infringement in the first place, the degree to which the original work was copied is considered again when determining whether a defense exists. Third, what is the purpose for which the copy was created? Does the copy transform the original into something else? For example, the U.S. Supreme Court held that 2 Live Crew's version of the Roy Orbison song, "Pretty Woman," was transformative. Although 2 Live Crew clearly copied the music of the original song, the purpose of the copy was to parody the original innocent relationship portrayed in the song and contrast it with a modern relationship. Thus, a romantic ballad was transformed into a piece of social commentary.¹⁴ The final element of fair use is the effect that the copy has on the market for the original. Evidence of market effect was not presented in the "Pretty Woman" case, and the Supreme Court sent the case back to the trial court for a finding on this question. However, such a finding was never made, as the parties settled the case at that point in the litigation.

The very definition of the protections provided by copyright law is changing with technology. The owner of a music copyright has the right to control the reproduction, preparation of derivative works, public performance, public display and public performance.¹⁵ Recently the 2nd U.S. Circuit Court of Appeals affirmed a district court ruling that downloading music does not constitute a performance,¹⁶ while streaming over the Internet is a public performance. In another important case, the music publishing industry was rebuffed by the court when it argued that ringtones should be subject to public performance royalties.¹⁷ As new methods of music delivery are developed, the question of what is a performance and what is a copy will have to be determined. Armed with an understanding of copyright law under the old models of the music industry, our students and graduates may well be the principal players in developing new business models that are not based on the traditional rights protected by copyright laws. As one commentator noted: "[t]he Copyright Act is a relic of history created for the benefit of entrenched interests. Courts are increasingly challenged when called to apply the aging Copyright Act to new technologies unimaginable at the time of its drafting. The Copyright Act is ripe for reform."¹⁸

One additional and very significant aspect of modern copyright law is criminalization of copyright violations since the passage of the Digital Millennium Copyright Act in 1998.¹⁹ By making the manipulation of digital rights technology a crime, Congress, in conformance with the requirements of

the World Intellectual Property Organization Treaty of 1996,²⁰ effectively made unlicensed copying in the digital environment a crime, where historically it had been a matter of the enforcement of private rights.

Contracts in the Music Industry

Contract law is perhaps the most important topic from a practical standpoint. Students in all genres of music and all roles in the music and entertainment industries will enter into contracts with their collaborators, band members, media companies, etc. Understanding the structure and significance of contracts is essential to protecting one's own interests and can also be a source of power when negotiating contract terms.

The basic elements of a contract are agreement, consideration, legality and capacity. In the music industry there may be questions of capacity when young performers enter into agreements with agents, producers, etc. Generally, for college students and beyond, the capacity requirement is met. Similarly, assuming our young composers and performers are not engaging in activities that violate copyright or other laws, it is likely that the subject matter of their music contracts will be legal. The more challenging aspects of contract formation are determining whether an agreement has actually been reached and whether it is supported by legal consideration. *Vian v. Carey*,²¹ a case brought by Mariah Carey's stepfather against the performer for his share of profits from various Mariah Carey merchandise is an excellent illustration of the pitfalls that surround contract formation. Joseph Vian, the stepfather, claimed that his conversations with Carey that occurred prior to her becoming famous constituted an implied contract in which she agreed to license the use of her name and likeness to Vian for merchandise such as Mariah dolls. The court disagreed, finding that the circumstances of the conversations, such as the times and locations when they occurred and the casual nature of the exchanges, were evidence that the parties did not intend to form legally binding mutual obligations. The case underscores the fact that a contract has to be an intentional act in which the agreement of the parties is clearly manifested²² and supported by an exchange of value.

Beyond the basic legal requirements of a contract, the music industry has its own, very complex contracts that may be incomprehensible to the inexperienced musician. The traditional contract, which is being supplanted by the "360 deal," gives a record company the rights to the artist's income from activities not previously covered by recording contracts such as concert revenue, merchandise and endorsement revenue. Given the fact that the older version of the recording contract was branded by one critic as akin to slavery,²³ the insistence by the industry that it also gain rights to additional income streams presents a serious question of overreaching. Moreover, the fact that these contracts are being used for newer, younger artists, who are likely to be less experienced in the business aspects of music, underscores the importance of giving students tools with which

to understand what is being demanded in these new, comprehensive deals before agreeing to their terms.

Many other contracts exist in the music industry, including collective bargaining agreements for symphony and Broadway musicians, and contracts with agents, collaborators, employers, etc. Music graduates should, at the very least, understand the basic concept of contractual agreement and the types of issues that are included in contracts common in the industry.

When disputes arise in the performance of contractual obligations, the avenues available to resolve them may be informal, contractual or legal. Of course, parties can negotiate with each other to settle their differences. However, when that is not possible, alternative dispute resolution (ADR) mechanisms or litigation are the only alternatives. The advantages of the former over the latter are well documented in the music industry as elsewhere.²⁴ From the musician's perspective, the costs associated with litigation may make the whole process beyond his or her reach. From the industry's perspective, the publicity associated with these disputes only adds to the already negative perception many musicians and others have of the business.²⁵ The important point for the inexperienced musician is that ADR is far more likely to be available if it is included as a term of the contract itself, rather than trying to insist on ADR once a dispute has arisen.

Business Relationships

The first reversion rights demands for return of copyright are now being made under the 1976 amendments to the Copyright Act.²⁶ The relationship between the artist and the recording company will determine whether or not an artist's creation was a work for hire and whether the artist is entitled to benefit from the reversion provision and regain the royalty rights that were previously transferred to the record company. While it will be a long time before today's students' reversion rights will be enforceable, language in today's contracts will determine the outcome 35 years in the future.²⁷ Recently, the heirs of Bob Marley attempted to exercise reversion rights for pre-1976 Marley recordings. The court examined the recording contracts entered into between Marley and Island records in 1972, 1974 and 1975 and determined that, in fact, the songs were works for hire and that, as such, they were the property of UMG, the successor to Island Records.²⁸

The other significant business relationship is the one between or among musicians who collaborate and/or perform together. The Audubon Quartet litigation in Virginia provides a rich source of material about the business of music. The Audubon Quartet's unhappy dissolution is chronicled in an excellent *New York Times* article titled "The Broken Chord."²⁹ The quartet consisted of four accomplished classical musicians who were affiliated with Virginia Tech and whose stewardship of the business side of their quartet led them to dissolution and to personal bankruptcy. There are many lessons to be learned from the Audubon Quartet, but perhaps what is most striking is that these four successful performers (they toured China, played at the White House, each had

a paid residency at Virginia Tech) had acted in such a way as to cause the loss of hundreds of thousands of dollars, and possibly their valuable string instruments, in the bankruptcy proceedings that followed their break up. While the facts are complex, and the personalities of the participants surely played a role in how damaging the break up was, the case is especially instructive to students on this point: the form of business entity that musical collaborators enter into will dictate the rules of how the group should govern itself, make decisions, add and exclude members, and dissolve. Failure to understand these rules and follow them can lead to serious consequences.

Musicians often work with each other on collaborative music projects. If they are doing so with the intention of marketing the result, they are often surprised to learn that they may have formed a partnership, or, at the least, a joint venture, in which parties owe each other fiduciary duties of loyalty and trust. When there is collaboration, there will be a contract. Preferably, it will be the intentional document that is negotiated between or among the participants with the advice of an attorney or a seasoned professional. At worst, it will be the implied agreement created by the default rules of the applicable state partnership statute.³⁰ In either case, it will cover the division of profits; the ownership of property, including the group's name and any other intellectual property created by the group; the admission of new members and dissociation of existing members; liability to third parties for the acts of any of the partners in the course of the partnership business; and more. The litigation among the members of the group Sugarland provides an excellent illustration of the importance of a partnership agreement. The complaint in *Hall v. Nettles*³¹ chronicles many issues common in musical partnership breakups: breach of partnership agreement by excluding one of the members of the group; failure to account for profits earned after the exclusion, including failure to disclose information about the income of the group; [failure to determine the right to share in the group's income and property, including brand or good will, as well as the trademarked band name.] How the group resolved these issues is unknown as the parties reached a confidential settlement on the eve of the trial. The most surprising fact is that the members of this successful group never had a written partnership agreement, and, as a consequence, the resolution of their disputes in the absence of the last minute agreement, would have been governed by statutory provisions that, most likely, the members of the group knew nothing about when they began to work together.

Conclusion

Preparing students for careers in the music industry is a daunting challenge in today's environment. Nevertheless, it is our responsibility to provide them with basic tools to help them understand the opportunities and pitfalls that they are likely to encounter. At the very least, we should make them aware that actions they take at the very beginning of their careers really do matter and can

have lifelong economic consequences. If the only lesson they take away is that they need professional advice before signing on the dotted line, we will have accomplished a great deal.

Appendix

Course Objectives: There are two main course objectives. The first objective is to acquaint students with basic legal concepts that they are likely to encounter in the music industry: contracts, censorship, copyright and licensing, tax and accounting requirements, and types of business organizations. The second objective is to introduce students to resources that they can turn to when they encounter law-related issues.

Week	Topic	Readings
1	Introduction	Waller v. Osbourne: (parents of adult son who committed suicide unsuccessfully sue Ozzy Osbourne, claiming lyrics caused their son's death)
2	Constitution First Amendment	The United States Constitution Skywalker Records, Inc. v. Navarro (2 Live Crew I) & Luke Records, Inc. v. Navarro (2 Live Crew II) ("Nasty as They Wanna Be" album found not obscene, actions of local sheriff threatening record stores if they did not remove album deemed prior restraint and unconstitutional)
3	Contracts	Vian v. Carey, Faris v. Enberg (elements of an enforceable contract)
4	Copyright and Licensing	Smith v. Muelbach (what is copyrightable), EMI v. Premise Media (sampling), Campbell v. Acuff Rose Music (Fair Use), EMI v. White (PRO's), U.S. v. ASCAP (downloading is not performing) www.benedict.com
5	Publishing	Sweet Lullaby (conflict between traditional music and Western copyright law), Pump v. Aerosmith (trademark protection)
6	Copyright and Trademarks	Todd Brabec and Steve Winogradsky, "Comments on negotiating songwriting agreements" http://108-comments-on-negotiating-songwriter-agreements.pdf
7	Recording	Fifty Six Hope Road v. UMG (Bob Marley's contracts)
8	Management	Abkco Music, Inc. v. Harrisongs Music, Ltd (2nd Cir. 1991)
9	Management cont.	Warfield v. Jerry Vogel Music Co., 1978 U.S. Dist. LEXIS 14151 (S.D.N.Y. 1978)
10	Performance	Coppel Promotions v. Bolton (touring contract)

Week	Topic	Readings
11	Business Entities	Hall v. Bush (Sugarland partnership), the Audubon Quartet (corporation)
12	Money Matters	Royalty Problem & Taxes (Sonny Phlunky tax return at http://www.artstaxinfo.com/buy.shtml .) IRS Form SS-8

...

Ronnie Cohen is a professor in the Luter School of Business at Christopher Newport University in Newport News, Virginia. Her area of specialty is business law. She holds a JD and LL.M. (taxation) from the College of William & Mary. She has published in the areas of law and technology, contract law and feminism (including feminist perspectives on corporation law and tax). She is co-author with Janine Hiller of *Internet Law & Policy*, (Prentice-Hall, 2000).

Endnotes

- ¹ Daniel Wakin, "The Broken Chord," *New York Times*, December 11, 2005, Arts Section, available at: <http://www.nytimes.com/2005/12/11/arts/music/11waki.html?pagewanted=1>.
- ² Douglas Lowry, "Culture as Catalyst: Shifting Currents Beneath the Music Business Model," *Journal of Performing Arts Leadership in Higher Education*, Newport News: 1 (2010) 47.
- ³ Gary Beckman, "Arts Entrepreneurship Curricula in Higher Education: An Examination of Present Efforts, Obstacles, and Best Practices," *Journal of Arts Management, Law, and Society* Washington: 27 (2007) 87.
- ⁴ In the appendix to this article I include a brief outline of topics in the Business Law for Musicians Course that I teach to undergraduate music students. I recommend editing the cases included in the table so that they are readable for students not accustomed to reading legal materials.
- ⁵ Jeff Carter, "Strictly Business: A Historical Narrative and Commentary on Rock and Roll Business Practices," 78 *Tenn. L. Rev.* 213, (2010).
- ⁶ Ashlye Keaton and Jerry Goolsby, "The Role and Responsibilities of Law Schools in the Deconstruction and Resurrection of the Music Industry," 13 *Tul. J. Tech. & Intell. Prop.* 165 (2010).
- ⁷ *Smith v. Muehlebach Brewing Company* 140 F. Supp. 729 (W.D. Mo. 1956). In a suit for copyright infringement of a musical piece, the court held that the copied sound, which was the "tick tock" sound of a clock, was not original and therefore not protected by copyright. See Attorney Benedict O'Mahoney's website, www.benedict.com, an excellent portal for teaching the basics of copyright protection and for examples of infringement, including court decisions in several famous musical disputes.
- ⁸ A copyright infringement suit was brought by the estate of John Cage against Mike Batt for copying Cage's piece, "4'33." The case was settled without a court hearing, but raises some interesting questions. See "Silent Works do Battle" at <http://news.bbc.co.uk/2/hi/entertainment/2133426.stm>.
- ⁹ *Bright Tunes Music Corp. v. Harrisongs Music, Ltd.*, 420 F.Supp. 177 (S.D.N.Y. 1976).
- ¹⁰ *Ellis v. Diffie*, 177 F.3d 503 (6th Cir. 1999).

- ¹¹ Karen Bevell, "Copyright Infringement and Access: Has the Access Requirement Lost Its Probative Value?" 52 Rutgers L. Rev. 311 (1999).
- ¹² John Schietinger, "Bridgeport Music, Inc. v. Dimension Films: How the Sixth Circuit Missed a Beat on Digital Music Sampling," 55 DePaul L. Rev. 209 (2005).
- ¹³ See, for example, the court's discussion of the use of 15 seconds of John Lennon's song, "Imagine" in the film "Expelled" in EMI v. Premise Media at <http://cyberlaw.stanford.edu/system/files/EMI+v.+Premise+PI+Order.pdf>.
- ¹⁴ Campbell v. Acuff Rose Music, Inc., 510 U.S. 569 (1994).
- ¹⁵ 17 USCS § 106 (2011).
- ¹⁶ U.S. v. ASCAP (2d Cir. Sept. 28, 2010).
- ¹⁷ In re Cellco Partnership, 2009 WL 3294861 (S.D.N.Y. Oct 14, 2009).
- ¹⁸ Kurt E. Kruckeberg, Copyright "Band-Aids" and the Future of Reform 34 Seattle Univ. L. R. 1545, 1570 (2011).
- ¹⁹ 17 USC §1204 (2011).
- ²⁰ Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) available at: http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm7_e.htm.
- ²¹ 1993 U.S. Dist. LEXIS 5460 (U.S. Dist. Ct. S.D.N.Y. 1993).
- ²² It is important to note that not all contracts are required to be in writing; however, the lack of a writing can, as in this case, be taken as an indication that a formal agreement between the parties was not reached.
- ²³ Phillip W. Hall Jr., Smells Like Slavery: Unconscionability in Recording Industry Contracts, 5 Hastings Comm. & Ent. L.J. 189 (2002).
- ²⁴ Kaleena Scamman, "ADR In the Music Industry: Tailoring Dispute Resolution to the Different Stages of the Artist Label Relationship," 10 Cardozo J. Conflict Resol. 269, (2008).
- ²⁵ Id.
- ²⁶ 17 U.S.C. §202 (2011).
- ²⁷ An excellent article describing reversion rights and work for hire with regard to superheroes is John Harlest, "Adventures in Copyright: Works Made for Hire and Transfers of Ownership Under the Copyright Act." 22 S. Carolina Lawyer 17, (2010). The author of the article notes that "[t]he vast majority of works are long forgotten 35 years later and a reversion of rights is unlikely. For those that achieve commercial success, as in well-known works starring Marvel superheroes, memories are long and the stakes are enormous. The moral of the story: get it right at the beginning."
- ²⁸ Fifty-Six Hope Road Music Ltd v. UMG Recordings, Inc. available at <http://www.loeb.com/files/Publication/349c1de3-6559-408a-9847-06d4a3e711ba/Presentation/PublicationAttachment/914fbfb-8f82-41f0-9e19-0949b900b19f/Fifty%20Six%20Hope%20Road%20Music%20v%20UMG%20Recordings%20SDNY%20Sept%202010.pdf>.
- ²⁹ Daniel Wakin, "The Broken Chord," *New York Times*, December 11, 2005, Arts Section, available at: <http://www.nytimes.com/2005/12/11/arts/music/11waki.html?pagewanted=1>.
- ³⁰ The Uniform Partnership act has been adopted by 38 states. It provisions can be found at http://www.law.upenn.edu/bll/archives/ulc/uparta/1997act_final.htm.
- ³¹ <http://ipandentertainmentlaw.files.wordpress.com/2008/08/sugarland-hall-v-nettles.pdf>.

A UNIVERSITY LAWYER'S PERSPECTIVE ON STUDY ABROAD TRIPS

It was a moment that I will never forget, but I wish that I could. A colleague and I were leading a study abroad trip to South Africa. We were about to leave the University of Pretoria to catch an overnight train from Johannesburg to Cape Town. Yet, one of the students, John,¹ was missing. When asked where John was, his roommates, Laurel and Hardy, responded that they had not seen him since 9:30 the previous evening. In direct defiance of our explicit instructions, John had snuck out of the residence facility and disappeared into the streets of Pretoria. Laurel and Hardy had seen no reason to tell us that John was gone until 7:30 the next morning. As I gazed at the seven-foot wall topped with electrified razor wire that surrounded our residence facility—a measure that the University of Pretoria deemed necessary to protect visiting scholars from the criminals who roamed the streets—I imagined all sorts of nasty scenarios. John was dead and his naked body was lying in a dumpster. A group of squatters, who would demand a ransom from the “rich” Americans, had kidnapped John. Someone had assaulted John, and he was lying in a gutter along some side street. John had overdosed on drugs or become intoxicated and would wake up in some strange location.

As my colleague and I contemplated these alternatives, we were forced to make a rapid decision. Obviously, we could not leave Pretoria without John. Yet, if we delayed our departure to try and find John, we would miss the train to Cape Town and either have to fly (an expensive proposition) or wait three days for the next train. The entire course would be disrupted. The only logical solution was for one instructor to stay in Pretoria and work with the local police to find John or his dead body while the other instructor took Laurel, Hardy and the dozen other students to Cape Town. Just as I was about to suggest that I, as the university attorney and as the person with the most extensive personal contacts in Pretoria, was the logical person to stay and help the police, John suddenly appeared, walking toward us from the general direction of the University of Pretoria's student housing. While he appeared to be a bit hung over and somewhat disoriented, he seemed generally OK. We quickly put John on the bus and departed for the train station. Despite John's blatant disregard for his own personal safety and our rules, there was no disruption to our trip, and John was safe.²

Yet, those few terrifying moments on a cold (southern) winter's day in Pretoria illustrate a broader and more important point—leading a study abroad course involving young adults carries certain inherent risks.³ Moreover, these risks lead to potential legal problems and/or liability for the faculty member and/or the institution.⁴ Any faculty members—including the university's legal counsel—can find themselves in a situation that leads to short-term danger and long-term litigation. Thus, any faculty member must be aware of the legal implications of leading a study abroad trip.⁵

Because music educators frequently lead orchestras and choirs on foreign

trips, it is particularly important for these faculty members to be aware of the legal realities surrounding study abroad.⁶ In this endeavor, the university's legal counsel is the faculty member's best friend.⁷ He or she will be able to provide guidance and expertise to make the study abroad experience as enjoyable as possible.

The purpose of the article is to set out one university lawyer's perspectives on study abroad trips. In particular, I want to focus on some considerations that faculty should be aware of when they consider leading a study abroad trip. The article is not intended to be a comprehensive review of all issues or even to definitely describe all aspects of the issues identified.⁸

I. Does the University Regard This Trip as a University Trip?

Not all study abroad trips are created equal.⁹ Some study abroad trips may have the full backing of the institution and its insurance. Other trips may merely be affiliated with the college or university but arranged by other parties. Some trips may be nothing more than a faculty member's summer excursion or a way to earn additional cash. Put another way, there is a distinct legal difference between Dr. Bach's three-credit course on German composers in Germany, the chorus's tour of Austria with the alumni association and Mr. Holland's work as an instructor for the Salzburg Summer Music Camp. The distinction between these three trips determines whether the university (and the university's insurance) will have responsibility if something goes wrong.

Yet, students, parents of students and even some faculty members do not always understand these distinctions.¹⁰ When the two students enrolled in the Salzburg Summer Music Camp with Mr. Holland get into trouble, they expect the university to assist them even though the provost and general counsel are completely unaware that Mr. Holland is working the summer in Salzburg and that two students accompanied him.¹¹ Similarly, when the alumni association's trip with the chorus results in a major lawsuit, the university is going to deny any liability and assert that its alumni association, which is likely a private non-profit corporation, is the responsible party. Conversely, when Dr. Bach's course encounters any sort of difficulties, the university will use its full legal, political and financial resources to assist Dr. Bach and his students.

The point is clear. Before a faculty member leaves the United States with students, the institution, the faculty member, the students and the students' parents need to understand the role of the university with respect to the trip. If the institution is not taking responsibility, then the faculty member may well choose to increase his or her own personal liability insurance. Moreover, when the university is not sponsoring the trip, students and their parents need to acknowledge—in writing—that they understand the university is not sponsoring the trip.

II. Foreign Countries Are Governed by Foreign Law

One of the primary reasons to undertake a study abroad trip is to experience a foreign culture. Yet, participants also experience foreign law.¹² While students

may delight in the fact that European countries allow 18-year-olds to drink or that the Netherlands has rather lax drug laws, the realities of foreign law generally are far harsher. Things that Americans take for granted—Miranda rights,¹³ the right to a lawyer and a right to be formally charged before a judge within a short time—simply do not necessarily exist in the criminal justice systems of other nations.¹⁴ The freedom of expression, which Americans regard as sacrosanct, is substantially limited in most Western nations and may not exist in other parts of the world. Outside of Europe and North America, many nations ban alcohol and impose draconian penalties for drug use. In sum, behavior that might result in a night in jail and a wrist slap in the United States can be an absolute nightmare in Europe and a life-changing event in much of the developing world.

Again, the bottom line is clear. Faculty, students and students' parents need to be aware of the requirements of foreign law and that foreign nations expect students to obey local laws. If a student is arrested abroad, the Vienna Convention on Consular Relations gives them an absolute right to request assistance from the United States embassy or consulate.¹⁵ Faculty members should have the address and phone numbers of the local embassy and consulate readily available.

III. Murphy's Law Prevails

In a real sense, a university's general counsel has one job—to worry. We review contracts because there is a 1-in-1,000 possibility that something will go wrong. We demand that obvious policies be put in writing because there is a remote chance that the university will be exposed to liability if policies are not clear. We insist that faculty undergo training sessions that seem to do nothing more than impart common sense, because we recognize that a small portion of humanity behaves in fundamentally irrational ways. In short, we assume that Murphy's law will prevail—if something can go wrong, it will.

Faculty members who lead study abroad trips should have a similar attitude. Hope for the best, but expect and plan for the worst. Study abroad leaders should not make assumptions; rather, they should develop contingency plans.¹⁶

First, one student will get sick and require an emergency room visit. Leaders should know the quickest route to a hospital or clinic in each place that the group visits. Since American health insurance policies do not necessarily cover foreign medical care, students need to clarify the scope of their coverage prior to the trip and the trip leaders need to be aware of any gaps in the coverage.¹⁷ Similarly, faculty should be aware of any medical conditions and any medications that the student may need.¹⁸

Second, one student will misplace his/her passport, credit card or plane ticket.¹⁹ No matter how much you stress the importance of the document, it is virtually inevitable that it will be misplaced. Both the student and someone in the United States should have a copy of the passport as well as all credit card numbers. Faculty members should know how to contact the U.S. Embassy or consulate and how to contact major airlines.

Third, students will do irresponsible things. The introduction to this article details one obvious example, but another colleague took a student to Oxford who sought to sleep with someone from every Oxford college. A foreign culture—particularly in an urban area—frequently poses safety concerns that simply do not exist on most U.S. university campuses. Faculty members should make certain that students are aware of the risks and take appropriate precautions. Faculty members may wish to have students agree to certain rules of conduct before the trip and may wish to state that violations of the rules will result in an immediate trip home. While students are adults and generally deserve to be treated as such, it is often appropriate to demand that students travel in groups or return by a specific hour.

Fourth, there will be a significant problem with accommodations or transportation.²⁰ Foreign contract law is very different from American law, particularly outside of the common law countries that were once part of the British Empire. Consequently, resolution of disputes with local firms may be more difficult and far less satisfactory than in the United States. At best, faculty members need to be prepared to demand that they receive the hotel or bus company promised. At worst, they need to have a backup plan that will allow the students and faculty member to get out of the country and back home. At a minimum, group leaders should have emergency cash or credit cards to cover these unexpected expenses.

Fifth, the information that is learned online or from a local resident will be wrong or incomplete. Hotels that look wonderful and safe on the Web turn out to be fleabags in unsafe areas. Ideally, those who lead study abroad trips will have substantial experience in the locations being visited and will have a network of local contacts. However, if this is not possible, the faculty member should rely on experienced travel professionals—such as Outlook International, EF travel or a local agency that handles foreign travel for groups. Faculty members should not make their own arrangements. Just as directing an orchestra or choir requires a professional (a music professor), arranging the logistics of a study abroad trip requires a professional.

Conclusion

A study abroad trip can be a life-changing experience for the students and the faculty. With increasing globalization, every student who is able to study abroad should study abroad. Yet, sending a group of young adults to a foreign land with a faculty member can pose challenges for the university lawyers due to numerous risks and potential liabilities. Faculty members can minimize risks and liabilities by clearly understanding the institution's role, emphasizing the requirements of foreign law and planning for the worst.

...

William E. Thro is university counsel & associate professor of constitutional studies at Christopher Newport University. He served as solicitor general of

Virginia from 2004 to 2008 and is the current president-elect of the Education Law Association. He received his undergraduate degree summa cum laude from Hanover College, a graduate degree with honours from the University of Melbourne and a law degree from the University of Virginia, where he was a published member of the *Virginia Law Review*. In addition to his duties as the university's legal counsel, he teaches courses in constitutional law and constitutional theory and leads a study abroad class on constitutional transformation in South Africa.

Endnotes

- ¹ Like the old "Dragnet" episodes, the names have been changed to protect the innocent, or, in this case, the guilty.
- ² We did refer John to the student disciplinary office at our institution. Because of the confidential nature of those proceedings, I have no idea what penalty was imposed, but I do know that he was not expelled.
- ³ For a general discussion of these risks, see William P. Hoye & Gary M. Rhodes, *An Ounce of Prevention Is Worth ... The Life of a Student: Reducing Risk in International Programs*, 27 JOURNAL OF COLLEGE & UNIVERSITY LAW 151 (2000); William P. Hoye, *Dealing With Overseas Risks In A Globalized Post 9/11 World* (2005) (Presentation to the National Association of College & University Attorneys Annual Conference).
- ⁴ Students frequently sue institutions for conduct that occurs in study abroad classes. Like most lawsuits, the cases involving study abroad programs rarely result in published reports decisions. Nevertheless, there are a few high profile published opinions involving study abroad programs. See, e.g., *Bird v. Lewis & Clark Coll.*, 303 F.3d 1015, 1017 (9th Cir. 2002). *King v. Bd. of Control of E. Mich. Univ.*, 221 F. Supp. 2d 783, 791 (E.D. Mich. 2002); *Paneno v. Centres for Academic Programmes Abroad Ltd.*, 13 Cal. Rptr. 3d 759, 761 n.1, 766 (Cal App. 2004); *Bloss v. Univ. of Minn. Bd. of Regents*, 590 N.W.2d 661 (Minn. App. 1999); *McNeil v. Wagner Coll.*, 667 N.Y.S.2d 397 (N.Y. App Div. 1998); *Fay v. Thiel Coll.*, 55 Pa. D. & C.4th 353, 367 (Ct. Com. Pl. 2001). For a review of the tort law considerations surrounding study abroad programs, see generally Vincent R. Johnson, *Americans Abroad: International Educational Programs & Tort Liability*, 32 JOURNAL OF COLLEGE & UNIVERSITY LAW 309 (2006).
- ⁵ A comprehensive discussion of the legal implications is well beyond the scope of this short article. For a comprehensive discussion, see generally the materials contained in Nancy E. Tribbensee (ed.), *STUDY ABROAD IN HIGHER EDUCATION: PROGRAM ADMINISTRATION AND RISK MANAGEMENT: A COMPENDIUM* (2005) (National Association of College & University Attorneys).
- ⁶ Faculty members should consult their own institution's counsel before embarking on any study abroad trip.
- ⁷ For an overview of the factors that the institution's legal counsel should consider, see Stacey Bolton Tsantir & Donald Amundson, *Ambassadors Abroad: Due Diligence In Sending Students Overseas* (2011) (Presentation to National Association of College & University Attorneys Workshop on the Global University).
- ⁸ As my counterparts at the University of Minnesota explained:
It is often difficult to establish norms or standards for best practices in higher education. Similarly, there is no "how to" manual to tell institutions exactly how to run safe and secure education abroad programs. That said, a number of professional organizations have created commonly agreed upon practices. The resource most often referred to is the publication entitled "Responsible Study Abroad: Good Practices for Health and Safety" created by the Interassociational Advisory Committee on Health and Safety in Study Abroad. These good practices include the

responsibilities of program sponsors, program participants and recommendations for parents/guardians/families. These responsibilities are often said to be the baseline level of acceptable expectations for the establishment and successful operation of education abroad opportunities.

The Forum on Education Abroad published their “Standards of Good Practice.” which includes questions to guide self-assessment. “Standard 8: Health, Safety and Security” is currently fairly general in nature but an expanded draft has been suggested. Both documents will assist universities in considering new programs and remind these institutions with existing programs of key considerations.

Tsantir & Amundson, *supra* note 7, at 2 (footnotes omitted). *See also* The Forum on Education Abroad STANDARDS OF GOOD PRACTICE (2008); Interassociational Advisory Committee on Health and Safety in Study Abroad, *Responsible Study Abroad: Good Practices for Health and Safety* (2002)

⁹ As Professors Hoye and Rhodes observed:

The level of legal liability risk facing U.S. higher education institutions operating international programs is largely dependent upon their relationship to each program. As the degree of ownership and control exercised over a particular program by the home campus increases, the potential liability exposure of the home campus also increases (in the absence of a contractual provision to the contrary). The relationship between most U.S. colleges and universities and each of their international programs can be defined in one of four ways: (1) university owned/operated programs; (2) contractual programs; (3) permissive programs; and (4) hybrid programs.

Hoye & Rhodes, *supra* note 3, at 155.

¹⁰ Although the 26th Amendment gives 18-year-olds the right to vote, parents of college-age students continue to be protective of their children, particularly when the parents are financing the trip. Indeed, the first meeting between the faculty member and the students’ parents arguably is the most important aspect of the trip. If the parents do not trust the faculty member, they will not allow their child to go on the trip.

¹¹ At many institutions, faculty members have complete freedom from the middle of May until the middle of August.

¹² At the same time, persons leading study abroad trips are subject to certain American laws. *See* John H. Robinson, *The Extraterritorial Application of American Law*, 27 JOURNAL OF COLLEGE & UNIVERSITY LAW 187 (2000). Moreover, there some instances where Congress regulates an American university’s relationship with foreign individuals. *See* 15 U.S.C. §§ 78dd-1 et seq. (Foreign Corrupt Practices Act); 22 U.S.C. § 611 et seq. (Foreign Agents Registration Act). For a discussion of avoiding liability under these federal statutes, see William F. Ferreira, *Going Global Legal Trends In University International Programs* (2011) (Presentation to the National Association of College & University Attorneys Workshop on the Global University).

¹³ *Miranda v. Arizona*, 384 U.S. 436 (1966).

¹⁴ “For example, the United States affords criminal jury trials far more broadly than other countries. Similarly, our rules governing pretrial interrogation differ from those in countries sharing a similar legal heritage. And the “Court-pronounced exclusionary rule ... is distinctively American.” *McDonald v. City of Chicago*, 130 S. Ct. 3020, 3044 (2010) (citations omitted). *See also Roper v. Simmons*, 543 U.S. 551, 624,(2005) (Scalia, J., dissenting) (“In many significant respects the laws of most other countries differ from our law-including ... such explicit provisions of our Constitution as the right to jury trial”).

¹⁵ *See Vienna Convention on Consular Relations*, April 24, 1963, 21 U.S.T. 77, 596 U.N.T.S. 261. However, the treaty does not create judicially enforceable rights. *See Sanchez-Llamas v. Oregon*, 548 U.S. 331 (2006) (failure to notify suspect of his right to contact his consulate does not require suppression of confession or disregard of state procedural default rules in habeas corpus proceedings). Australian and Canadian courts have reached a similar result. *See R. v. Abbrederis*,

(1981) 51 FLR 99, 115 (N.S.W.) (*VCCR* deals “with freedom of communication between consuls and their nationals. It says nothing touching upon the ordinary process of an investigation by way of interrogation.”); *R. v. Partak*, [2001] 160 C.C.C. (3d) 533, 570 (Ont.) (“[T]he Vienna Convention appears to deal with obligations between states as opposed to obligations owed to nationals.”); *R. v. Van Bergen*, [2000] 261 A.R. 387, 15 (Alta.) (“The Vienna Convention creates an obligation between states and is not one owed to [an individual].”)

- ¹⁶ At the outset, faculty members—in consultation with their institutional counsel and institutional administrators—should determine if it is safe to visit the location. The U.S. State Department posts travel warnings and advisories as well as information that is directly relevant to students. See U.S. Department of State Travel Information <http://travel.state.gov/>; U.S. Department of State Students Abroad: <http://studentsabroad.state.gov/>.
- ¹⁷ See generally Stacey Tsantir, *MEDICAL INSURANCE FOR EDUCATION ABROAD: PREPARING FOR A POTENTIAL CRISIS* (2010) (Council on Law in Higher Education).
- ¹⁸ During the South African trip where John disappeared, Bob experienced a panic attack and had to seek emergency medical treatment. Incredibly, Bob never told any of the instructors that he was prone to panic attacks. Nor did Bob bother to bring his medication to prevent panic attacks to South Africa.
- ¹⁹ With the advent of electronic ticketing, the hazards of losing a plane ticket have largely disappeared. Nevertheless, to the extent that paper tickets still exist, it is expected that students will manage to lose them.
- ²⁰ On the last day of our South African adventure, the tour bus to take us to the airport never arrived. Fortunately, we were able to find cabs to transport all students and their luggage.

DOLLARS AND SENSE: PIANOS IN THE MUSIC UNIT

Imagine this: a public brouhaha over the utilization of taxpayer money in a new university arts center. The eyes of many music executives will widen with happiness at the thought of *any* public money going toward their units—if controversy must accompany such largesse, it's a small price to pay.

But Maryland State Comptroller Peter Franchot objected to the \$553,264 spent on Steinway-designed pianos for the new performing arts center at Bowie State University. "I love Bowie State University and appreciate the prestige of a Steinway, but it's the Rolls-Royce [of pianos], and we're in a tough economic time," he said. "I think any taxpayer would arch an eyebrow at this purchase."¹

The following day, the state Board of Public Works outvoted Franchot, awarding the contract for a mix of 32 concert, budget and entry-level instruments to Steinway. An editorial in *The Baltimore Sun* praised the decision with the headline: "Penny-pinching on pianos for Bowie State University's new performing arts center won't save taxpayers a cent."²

It seems that the media coverage of this matter clearly documented the advantages of a long-term investment in durable and high-quality instruments. To borrow an automobile metaphor, pianos in music schools are driven the equivalent of 50,000 miles a year.

This article, written by an active pianist/professor who also has an administrative role at his university, will focus on the piano's uniqueness as an instrument in the higher education music unit. The areas to be covered are as follows: what makes a good piano, why pianists need the best instruments in order to grow as musicians, how the piano technician can be a most valuable staff member, and, finally, how to create a budget plan for both maintaining and replacing pianos.

Uniqueness of the Piano in the Music Unit

Pianos are part of the music unit's infrastructure. Most other applied music majors own their instruments and bring them to college, but the institution provides pianos. They are as necessary as computers, desks and music stands, yet they also serve an artistic purpose. There is at least one in every recital hall. They are absolutely essential in teaching studios, frequently needed in classrooms and rehearsal halls, and of critical importance in practice rooms. The success of many a performance rests on the quality of the piano. Piano teaching requires the best instruments if the finer points of touch, sound and pedaling are to be considered; similarly, practice room pianos must be of sufficient quality to review and expand on the lessons learned in the studio. Other studios and rehearsal spaces need good pianos to accompany vocalists or instrumentalists or to contribute to large ensembles. The classroom piano is the instrument par excellence for live demonstrations and, when the academic schedule ends for the day, might also serve as a practice instrument. In short, pianos are everywhere in the music unit; all are important, some vitally, and while they are all provided by the school, they also serve the entire institution.

More than many other instruments, they are also very complex machines.

The piano has over 12,000 working parts. Unlike the violin or the flute, which are held, even cradled by the performer, the piano sits obstinately on the floor, confronting its performers with a row of tooth-like keys and outweighing them by a significant margin. Between the finger's point of contact on the key and the production of the actual sound, all kinds of wooden, metal and felt pieces swing into motion, distancing the player from the actual sound. As soon as the sound is made, it is beyond the player's control, irretrievably decaying into silence. One cannot support the tone with the breath or make a crescendo on the same note with the bow. "Plunk" goes the key, "ping" goes the sound, and that's all there is.

And yet on a good piano, if 10 different pianists in a row sit down at the same keyboard, the listener will hear 10 different qualities of sound. If they all play the same piece, the listener will discriminate between 10 sonic varieties that defy verbal analysis. The same piece somehow isn't the same piece, and against all odds, this highly mechanical beast responds to 10 unique artistic personalities. Even 10 beginners make 10 different sounds on a good piano. Please note the qualifier: on a *good* piano!

What Makes a Good Piano

Good pianos start with the best raw materials, prepared to the strictest tolerances and standards of quality. Translation: the price of a piano is often a fairly good indication of its quality.

Sometimes a great deal of expensive material (such as wood, felt, or leather) that does not conform to standard is rejected or discarded. In both design and workmanship, much more time and attention is paid to details that might otherwise plague the owner or technician later. In the best factories, workers are more apt to be treated as craftspeople and given considerable responsibility, while in lesser factories most jobs are broken down into tiny, easily learned tasks, rendering workers replaceable cogs in a machine. Workers on the high-quality pianos are therefore better trained, stay with the company longer, and receive higher pay and benefits. Where machinery is used, it is at least as much in the interest of quality as efficiency, which may entail greater expense in its design. The result is pianos that are more uniform from one to the next, perform better, last longer, and require less remedial maintenance than lesser instruments.³

That last sentence perfectly summarizes the pianos most advantageous to the music unit. While no two pianos, even from the same maker, can be absolutely uniform, a degree of consistency is extremely important to pianists since they must adapt to whatever instrument is in the room. They will perform better, achieving a higher percentage of successful plunks and pings when it counts in the lesson or onstage. If the instruments last longer, there will be less need to replace them, thus saving money. Ditto for less maintenance. It seems obvious that the music unit should seek out the best pianos possible.

As an example of a widely used domestic brand, Steinway pianos have an

extraordinary reputation among artists, presenting organizations (most orchestras own at least one Steinway) and music schools, because they fulfill the needs just cited. They maintain their value over the years better than most brands. They stand up to the extreme climate conditions in the United States better than the high-end European pianos. Their very ubiquity in the professional world indicates that most student pianists today will most likely encounter Steinways in their professional lives, so they might as well get to know them thoroughly during their education.

The pianist Grant Johannesen, who also served as president of the Cleveland Institute of Music from 1974 to 1985, had this to say about the Steinway: “Most pianists of the last hundred years have played the Steinway, and if they didn’t start with it they ended up with it. There must be a reason why serious artists have chosen to play this instrument ... probably they all realized that it offers so much more.”⁴

Why Pianists Need the Best Instruments in Order to Grow as Musicians

Pianos in the music unit are as necessary as classroom desks, allowing performers to express their innermost thoughts and feelings through a Formica-covered slab of plywood.

Those aforementioned violinists and flutists, indeed all instrumentalists, develop great rapport with their personal instruments—these tools of their trade become extensions of the players’ souls. Such intense familiarity, bred by an almost umbilical connection to the same intermediary every day, fosters the development of an artist’s unique musical voice. On the other hand, pianists deal on a daily basis with different instruments. Unless these pianos are of a certain standard and properly maintained, student pianists are at a severe disadvantage as they attempt to acquire a foundational understanding of, and performing facility on, their chosen instrument. No less an authority than Chopin said that one needs to practice on the best instruments to know what is even possible at the piano.⁵

The concert pianist Murray Perahia goes into deeper detail:

Ideally, what you hear in your head should be translated directly to the tips of your fingers. But one has to work on techniques to produce sounds—not just play fast but to bring out a bass note, for instance, in a contrapuntal line. When I play a phrase on the piano I will try to hear the horn, say, or the oboe, and try to create the same effect on the piano. You have to listen carefully to orchestras and try to re-create those sounds at home. The more I hear nuances of sound, the more I realize the wealth of colors a pianist must understand and produce. It can be frustrating.⁶

Those few lines of prose encapsulate the daily struggles of learning and teaching piano. Note how many tasks Perahia mentions: inner hearing (ear training), touch sensitivity, instrumental technique, contrapuntal hearing (more ear training), orchestration, imagination, subtleties of sound production—all *on an instrument that is not your own*. “Frustrating” is an understatement.

When a piano is deemed good, when it becomes the pianist's co-pilot on the quest to make music, one can highlight two aspects of its operation that make a telling difference: (1) the key regulation, and (2) the hammer voicing is consistent and responsive from the lowest notes to the highest. Regulation involves everything from the weight of each key to the degree of hammer let-off at the string. We can easily get into the weeds discussing how a piano works, and alas, many of those who play the instrument don't know as much about what's under the hood as they should. Suffice it to say it takes a good technician and some serious time to maintain an even regulation. Voicing is determined by the hardness of the hammers. If the felt on the hammers is hard and compressed from long use or the application of a lacquer to the hammers' surfaces, the piano's tone quality will be bright. If the hammers are softer, either because they are new or because the technician has "needled" the hammers with a tool that breaks up the compression of the felt, the piano will have a more gentle, possibly muted sound. While most pianists can agree about how a piano feels (regulation), few agree about the ideal voicing, and the evenness of the voicing, or lack thereof, can drive a pianist crazy. Emanuel Ax:

Voicing is a matter of how hard or soft the hammers are when they hit the strings. If they're all very hard the piano produces a brilliant sound. If they're all very soft it produces a more muffled sound. If they're not even, you have to memorize which note is dead and which note is live. Muffled pianos are a big problem. You have to force them. The more variety in a piano, the better I like it. I'll always pick the piano that can produce the greatest number of different sounds.⁷

How the Piano Technician Can Be Your Most Valuable Staff Member

The piano that can indeed produce the most sounds may start with the finest materials and workmanship, but then a knowledgeable, skilled piano technician must maintain it. In music units across the country, however, you will find pianos beyond simple tuning (when the pinblock dries out from years of exposure to steam heat, the tuning pins cannot stay in place so the strings stretch and go out of tune). Forget voicing and regulation—it's especially true that in the cramped, airless spaces known as the practice rooms of many schools, you will find 50-year-old pianos with broken strings and missing ivories, pedal lyres falling off, and cigarette burns marring the ivories still attached to the keys. These pianos are played on for eight to 12 hours a day, seven days a week. In the meantime, back in the professor's studio, the lesson focuses on nuance and color, neither of which can be accomplished on the instruments available for practice if they are not properly maintained.

These pianos have deteriorated for two reasons: (1) no piano lasts forever, and (2) for any number of reasons, the staff piano technician cannot maintain them. The most obvious problem may be that there is *no* staff technician. Many schools have had to cut this line in an era of diminishing resources in all of higher education. In the long run, of course, it saves nothing, since the pianos need replacing sooner than later, and the very quality of education being offered

has already suffered greatly. The technician's budget for making repairs may be inadequate. Most likely, the sheer number of pianos in the workload overwhelms the technical staff. Steinway, for example, recommends one technician for every 50–60 pianos in the school's inventory.

Part of the problem, alas, may be the pianists themselves, who as stated before are the only instrumentalists (besides organists and perhaps percussionists) who do not have to provide or care for their own instruments in a school situation. Think of the student oboist who must purchase an instrument, keep it in good repair, and then spend even more for the tools and materials necessary for a lifetime of reed making. The finest violins now cost into eight figures; even student fiddles can cost many thousands of dollars. We pianists in academia are spoiled; many of us know next to nothing about the workings of a piano. We simply show up and expect it to be right. Administrators have instituted practice room fees for all students—perhaps piano students should pay even more.

These ideas find reinforcement in a document prepared by the College and University Technicians, a subcommittee of the Piano Technicians Guild, called "Guidelines for Effective Institutional Maintenance."⁸ It's a valuable document, with information concerning a technician's minimum qualifications and training, suggestions on budgets, climate and inventory control, purchasing, and compensation. The guidelines should be required reading for piano faculty and administrators. We don't need to reinvent the wheel; the techs have already done the work. Steinway & Sons also has a similar document called "Steinway Guidelines to Institutional Service" that helps administrators calculate not only the number of work hours to budget per technician but also how to calculate and plan a parts budget for ongoing maintenance.

A few words here about compensation that won't be found in the guidelines: first, piano technicians are rather scarce. In some areas of the country, they are next to extinct. With demand high and supply low, many technicians have comfortable, thriving private businesses tuning home and church pianos. And in that regard, they can sometimes generate greater income independently than working for an institution. Thus it is a rare technician who is willing to take on the Herculean labors associated with a music school. The point should be clear: piano technicians can be among the most valuable members of the staff; they deserve to be paid accordingly.

When It Comes Time to Replace Pianos ...

... start with an inventory. Chances are it will be out of date; so, a little help from some friends can come in handy. Several domestic and foreign manufacturers provide programs to analyze piano fleets, documents created for schools that provide an analysis of all pianos in the school (performance, teaching studios, classrooms practice rooms, etc.) detailing information on brand mix, type of use, age and value. This survey acts not only as an evaluation of current inventory but is also used to make a plan or road map for future purchasing, trickling down (for example, when a piano teaching studio piano is replaced with a new instrument, the older one might be moved to a voice studio, whose piano might then

go to a classroom, etc.), restoration and replacement. The inventory created can also assist the school with its insurance purposes. It gives the music executive a great deal of information when approaching potential donors to show exactly what the school needs. The service is often provided at no charge through authorized dealerships.

Piano purchase should be considered a capital expense, and ideally, a regular budget line should exist to replace older pianos in planned increments. Philanthropy can indeed provide funds needed to purchase instruments and can be a tremendous morale boost, not to mention a prominent publicity opportunity.

Conclusion

Performers, academics—indeed all music students and faculty in higher education—need the piano as an essential tool for the educational and artistic experiences. As stewards for the next generation of performers, teachers and audiences, we need to bring together all constituencies within our institutions—educators, administrators and technicians—to realistically assess the condition of our piano inventories and to ask three basic questions:

1. Does our piano inventory meet the fundamental requirements for those students whose education has been entrusted to us?
2. Does it fulfill our stated institutional mission statement?
3. Are we proud of what we see and hear on our stages, in our classrooms and in our practice rooms?

If the answer is yes, let the celebration begin. If the answer is no, well ... let the planning begin.

...

Robert Weirich is professor of piano and associate dean for strategic planning at the University of Missouri-Kansas City Conservatory of Music and Dance.

Endnotes

¹ Michael Dresser, "For Franchot, Purchase of 32 Steinway Pianos Strikes Sour Note," *The Baltimore Sun*, Nov. 16, 2011. URL: <http://tinyurl.com/btp3ztt>, accessed 11/27/2011.

² Editorial, "Franchot's Wrong Chord," *The Baltimore Sun*, Nov. 17, 2011. URL: <http://tinyurl.com/7s7wek4>, accessed 11/27/2011.

³ Larry Fine, *The Piano Book (A Guide to Buying a New or Used Piano)*, 1987, p. 20.

⁴ Corby Kummer, *Talking about Pianos*, 1982, p. 35.

⁵ Jean-Jacques Eigeldinger, *Chopin: Pianist and Teacher*, 1986, p. 25.

⁶ Kummer, p. 18.

⁷ Kummer, pp. 27–28. It should be noted that all three concert pianists quoted in this article are Steinway artists.

⁸ This document can be downloaded free at: <http://tinyurl.com/7mzth9a>.

FACILITIES THAT DELIVER: REPUTATION, ENROLLMENT, PROFIT, COMMUNITY RELATIONS

Arts facilities are some of the most expensive campus structures to build and maintain. Often, they are considered an extravagance rather than a necessity. Yet, data proves that arts projects can produce return on investment, build pride, enrollment, reputation, lifetime loyalties, endear patrons and become a revenue source, rather than a budget drain.

Arts facilities can be transformative to universities and to their host communities. Vision, design and program are critical to planning a vibrant facility. Informed management of this resource after opening ensures success. The academic landscape is transformed by facilities that are exciting and flexible. It is a timely message as universities across the country struggle with shrinking budgets. Cultural programs have become targets, with colleges selling off art collections, dumping music ensembles and cutting entire academic programs in the arts. It is certain that arts programs will be increasingly dependent on private contributions.

Qualitative vs. Quantitative

Historically, “arts and humanities have had a difficult time establishing their importance because they’ve never organized themselves as effective advocates,” writes Ron Jones, former dean of the College of Arts at the University of South Florida and now president of Memphis College of Art in *The Chronicle of Higher Education*. Jones has a unique perspective as president of the International Council of Fine Arts Deans and co-chair of the Arts Education Council.

“I am absolutely convinced that the arts are too insular. We define ourselves by majors, not looking beyond. Accountability is the order of the day. If we don’t embrace a larger role, we are threatened with demise,” he continues.

In 2010, Jones asked art deans to define the role of arts on campus. Three categories emerged: professional training and development, fostering inquiry and creativity, and reaching out. Reaching out included accepting the responsibility for serving as a powerful source for cultural exploration and understanding for all students enrolled in higher education, thus engaging the next generation of community leaders to appreciate and support the arts.

The problem was recognized in 2004 by the American Assembly at Columbia University, which concluded: “Research on the performing arts and on policy issues in the arts is underdeveloped. The need for knowledge is acute.” In fact, no comprehensive survey of the arts on campus has been done since the works of Jack Morrison, *The Rise of the Arts on the American Campus* (1973) and *The Maturing of the Arts on Campus* (1985).

A consortium study on arts engagement in 2007 and 2008 conducted by the National Survey of Student Engagement (NSSE), in collaboration with the University of Florida and Hanbury Evans Wright Vlattas + Company, architects and planners, supports Jones’ view that arts educators have not done all they can to engage the broader community. In that study, which surveyed eight top

public institutions (6,591 respondents) and eight top private institutions (2,450 respondents) in consecutive years, one of the most stunning statistics was the fact that students failed to attend arts events because they didn't know about them.

The need is great to change these outcomes. We need data to prove our value to our constituencies. We need data to survive. "The ideal is that 100 percent of students find value in an occasional encounter with the arts, and evidence that behavior is changing and they are carrying that valuing of arts into their roles in the community," writes Jones.

Another finding: students surveyed said they didn't perceive of arts venues as "active" spaces on campus. This presents a missed opportunity, one that might be influenced with new program thinking for established venues, or one that should be considered for programming of new facilities.

With this case study, we begin to establish that there is quantitative evidence to support the arts, resulting in a change in perceptions.

The Arts Can Pay Dividends: Proof

Christopher Newport University

- 4-year Liberal Arts
- State Supported
- 260-acre campus
- \$100 Million Budget
- 5,000 Students
- 2,200 Jobs
- \$112 Million Annual Economic Impact

Currently in its eighth year, the Ferguson Center for the Arts at Christopher Newport University, demonstrates the ability of good design, nimble budget strategies and creative programming to impact a university's core mission and bottom line. That

should capture the attention of university governing boards and CFOs.

After seven years in business, the Ferguson Center is an example of positive returns on most metrics. General admissions are up, paralleling the upward trend of higher-performing SAT scores and higher-performing students, as are the number of music, theater and dance majors. The university's reputation is enhanced in academic circles and the community. Furthermore, the project demonstrates how good business decisions and key readjustments brought the facility into a profit position.

The journey began with an intentional strategy by President Paul Tribble to put CNU on the map with a "world-class facility, a sparkling jewel." The university engaged high-profile design partners Pei Cobb Freed & Partners Architects and Hanbury Evans Wright Vlattas + Company. The goals were threefold: enhance the student experience, heal a town/gown edge and transform

the region into a cultural arts destination.

Arts as the Campus “Hot Spot”

There is mounting evidence that site selection is critical to the success of performing arts facilities as a campus energy generator. At CNU, a potential design problem – the reuse and renovation of an old high school to serve as part of the project – actually turned into a plus. The site motivated designers to create an “arts corridor,” tying the Ferguson Center synergistically to its neighboring attractions, The Mariners’ Museum and Peninsula Fine Arts Center. Together they become a marketplace of cultural exchange. On campus, the site helps form a “CNU triumvirate” with The Freeman Center (body), Tribble Library (mind) and the Ferguson Center (soul).

As mentioned earlier, the NSSE arts study revealed that students do not necessarily perceive arts venues as “active” places. Students perceive that arts venues come to life only during performance and sit idle and dark the remainder of the time. Finding ways to draw other members of the university community around and through arts facilities and having flexible spaces that can multitask for other campus activities are a first step to energizing the arts on campus.

At CNU, the marching band and lacrosse team practice on the Ferguson’s front lawn. Spontaneous jam sessions enliven the outdoor amphitheater.¹

Students have created an arts garden behind the facility for poetry readings and ad-lib performances. Other departments hold classes in the facility. Additionally, the Ferguson hosts 30 percent of student campus activities, dances, etc., amounting to 500 events each year, including 50 college admissions department events. The space is also a great venue for fundraising events.



Christopher Newport University outdoor amphitheater

The University of Florida is another excellent example of a school that has gotten the message. Its new Constans Theatre for the School of Theatre and Dance is joined to the Reitz Student Union by a covered walkway. An outdoor amphitheater steps down to the Green Pond, where performances sometimes are staged from floating platforms. Dance rehearsal studios with large glass windows are visible from a campus bus stop. Students passing by or through can’t help but be touched by art. Across campus, the Phillips Center for the Performing Arts is part of a district on a town/gown edge that includes the new McGuire Center for Lepidoptera and Biodiversity and the Harn Museum of Art.

Ursinus College, traditionally known for its sciences, has made an intentional investment in the arts in recent years. In an effort to jumpstart its

theater and dance programs, the campus capitalized on a site between its core campus and a parking lot, forcing daily traffic to walk past or go through the arts facility to get to campus. It has changed the campus dynamic, according to Domenick Scudera, a dance professor. “Five years ago, we graduated two theater majors and two dance majors. Now we have 20 to 25 majors in both disciplines,” says Scudera. The facility has generated interest from the wider campus community, as evidenced by the number of non-majors who work in productions and take theater and dance classes. A key academic piece has been the Common Intellectual Experience, a two-semester program required of all incoming



Forbes Center for the Performing Arts



University of South Florida School of Music

students. The arts are integrated into the program. “Seventy-five percent of the students are not pursuing theater, but we hope they become theater goers for a lifetime,” says Scudera.

Two newer Hanbury Evans projects support the thesis. James Madison University placed its newly opened Forbes Center for the Performing Arts² across a main thoroughfare, but near a parking facility for a growing part of campus, channeling foot traffic safely through an under-road tunnel. Pedestrians become part of the daily energy of the music and theater facility as they pass by lobbies and student practice areas. The University of South Florida’s (USF) new School of Music³ becomes a new campus threshold, capturing and directing pedestrian traffic to achieve broad engagement and public presence.

Impact of Iconic Architecture

Design is powerful. At CNU, a sweeping colonnade screens the old high school structure and links the two large theaters on either end, making a dramatic statement.⁴ A lighted stair tower becomes a community beacon, lighting up like a starship at night on busy Warwick Boulevard. Such iconic architecture can become a powerful campus brand, on which CNU has capitalized in the community and beyond. “The Ferguson is an important part of our brand marketing of our region,” said Florence Kingston,



Ferguson Center for the Arts

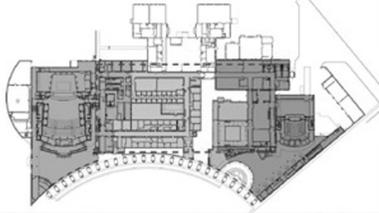
Newport News director of economic development in a 2006 *Daily Press* article on the venue's impact.

At USF, the School of Music's defining 400-foot "lyrical wall," defines a stage set as pedestrians move along the path. Parts of the wall hide the building; other parts define spaces – a student courtyard, a green amphitheater, intimate eddies. The wall soars to 55 feet and diminishes to bench height. Its playful distribution of light and shadow articulates "sound generating spaces" and the choreography of interaction. Enhancing teaching and learning, the "lyrical wall" diminishes barriers, sponsoring informal outdoor student practice spaces, unconventional teaching spaces, and an interface to observe and mingle. It becomes the school's identity, orders the site and serves as conduit between inside and out, between public and private.

Program Concerns and Opportunities

The value of a performing arts facility to campus sometimes is a balance between university needs and host community needs. At Ursinus, for example, the new facility is totally about the student experience. Student tickets are heavily discounted, and while guests are always welcome, there is no strategy for large-scale external marketing.

For Christopher Newport and Newport News, however, the equation was different. While regional venues, the American Theatre in Hampton and the College of William & Mary host annual artist series, there was no large hall (between Norfolk and Richmond) for Broadway shows and major acts. Citizens had to cross a congested bridge-tunnel to the Southside (Norfolk/Virginia Beach) or drive to the Commonwealth's capital to enjoy major performances. This created an opportunity for CNU to be a catalyst for cultural and economic growth for the Virginia Peninsula community. Clearly, citizens were thirsty for a cultural drink: in the 1,700-seat theater's first season, William Biddle, the Ferguson Center's executive director, estimated that 80,000 people bought tickets and attended shows for a venue that didn't exist the year before.



Program Space

249,750 g.s.f. (New construction 167,820 s.f. Renovation 71,930, Colonnade 10,000 s.f.)	Sound-isolated practice rooms, lighting labs, sound labs, scene shops, etc.
1,700-seat proscenium theater	Lobbies that multi-task as banquet spaces for fund-raising and university events
440-seat proscenium for student music and theater	Exterior space as a result of design: outdoor amphitheater
150-seat studio (black-box) theater	

CNU completed the more intimate 440-seat proscenium theater for student music and theater before completing the 1,700-seat facility, acknowledging its responsibility to students first, but both venues get lots of community use.

Acoustical and theater consultants

assured that the theaters have technologically advanced adjustable systems, allowing them to serve equally well as proscenium theater for drama presentations and as concert hall for major musical works. Lighting labs, sound labs and scene shops provide students with extraordinary learning tools. Students expect no less.

Name performers notice, too. Tony Bennett has appeared at the Ferguson Center several times, calling it “one of the greatest halls.”

Academic Outcomes

It’s no accident that many prospective CNU students say the Ferguson Center cinched the deal for them. “The unique structure of the Ferguson Center for the Arts stood like a lighthouse beam among ubiquitous college

[buildings],” wrote one prospective-turned-student in a 2007 essay contest. Students were asked to define, “How has CNU’s Ferguson Center for the Arts contributed to your educational and cultural experience?”

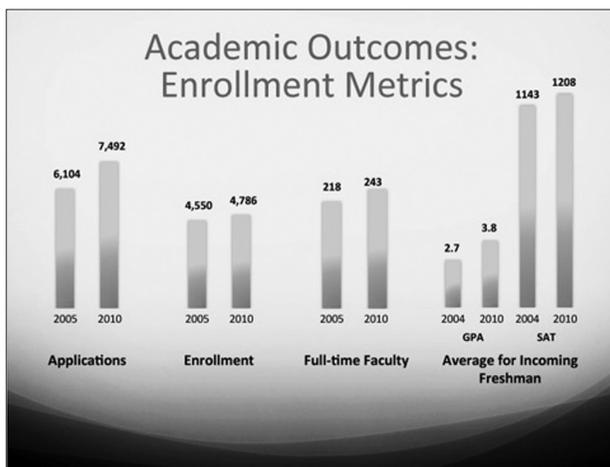
And imagine the impact of a performance on Oct. 20, 2005,

when internationally renowned Italian tenor Andrea Bocelli made a rare U.S. appearance in the Ferguson’s Concert Hall. Not only did he perform before a sell-out crowd, he invited CNU senior Anthony Colosimo, of Arlington, Va., to sing. Bocelli remained at Colosimo’s side and applauded the performance, prompting President Tribble to remark, “This is a great example of the remarkable opportunities that the Ferguson Center provides for our students.”

There’s no question the Ferguson Center has done wonders for the arts programs for which it was intended. The university is enrolling more and higher quality music, dance and theater majors, and the school’s reputation has resulted in additional faculty, like the 2010 hiring of a PhD in theater (history and art criticism), which strengthens the program.

As Jones points out, if the arts are to prove of value, “We have to get students across campus to come to events. We have to program in a way that has educational benefit, but also shows students that the arts are essential to life. There’s nothing worse than a student who comes to a performance and has a bad time ... the ideal is that 100 percent of students find value in occasional encounters with the arts. That would be evidence that behavior is changing. And these students would carry the value of the arts into their community roles.”

Facilities do play a role. Jones spoke of the impact of USF’s new music



facility when it opened this past spring. “When performers and audience members came into the new facility, their attitudes changed because of the environment. Once the music started, people gasped. If we were successful in proving our value, we’d be building new facilities on every campus. They are a good investment.”

CNU proves the point. The university is not unique in that it gives discounts to students. What is interesting, according to Biddle, is that a majority of student ticket buyers are not arts students.

Another CNU student essayist writes: “Attending events at the Ferguson Center like the Ella Fitzgerald Festival, Richmond Ballet’s “The Nutcracker” and listening to speakers like Paul Rusesabagina, the real-life protagonist in the movie “Hotel Rwanda,” leaves me feeling interconnected with the vast landscape of the world. My imagination grows as my education continues, and I am able to evolve and be a positive and productive participant in the world at large. The Ferguson Center contributes to the power of my confidence and makes all things possible.”

A conclusion of the 2007/2008 NSSE study is another compelling argument: “Arts engagement is likely to contribute to the knowledge and skills of students that may be associated to better performance in academic-related tasks.”

Reputation

In addition to academic reputation, the presence of the Ferguson Center has paid dividends in other ways. Bocelli’s performance is an outstanding example, and last season, the BBC Concert Orchestra recorded at the facility. The orchestra’s director selected it because of its history of presenting world-class shows. Regionally, it has become a second home to the Virginia Symphony Orchestra. Large talent agencies like ICM and William Morris telephone routinely, recognizing it as a national player.

CNU has hosted the All-State Band & Orchestra Concert, bringing the finest wind, string and percussion high school students and directors to campus, as well as the Governor’s School for the Arts Summer Program and auditions.

The University publishes the new *Journal of Performing Arts Leadership* and has attracted national and regional media attention from publications such as *Architectural Record*, *American College & University Magazine*, *College Planning & Management Magazine*, *The Virginian-Pilot* and the *Daily Press*.

The facility has earned regional and national design awards, including:

- Excellence in Design (Architecture), AIA of Hampton Roads
- Grand Prize, *College Planning & Management Magazine*, Education Design Showcase
- Louis I. Kahn Award (grand prize, post-secondary), *American School & University Magazine*, Architectural Portfolio
- Inclusion in the International Prague Quadrennial 2007 U.S. Exhibit for Theater Technology
- Walter Taylor Architectural Award for best meeting a difficult design

- challenge, American Association of School Administrators, American Institute of Architects, Council of Educational Facility Planners
- Design Citation Educational Facility Design Awards, American Institute of Architects Committee on Architecture for Education
 - Excellence in Design, Hampton Roads Association for Commercial Real Estate

Economics

Just as exciting as the Ferguson Center's impact on student attraction, retention and reputation is evidence that the arts can generate profit for a campus and be a significant economic stimulus for its host community. Sound strategies since opening have allowed the facility to fine-tune its business model for success.

Sales Data		
Attendance	Ticket Sales	Performances
• 2004-2005: 40,000	• 2004-2005: \$251,275	• 2006-2007: 84
• 2007-2008: 208,338	• 2007-2008: \$3,597,655	• 2007-2008: 93
• 2009-2010: 160,639	• 2009-2010: \$1,344,393	• 2009-2010: 32
• Total attendance since opening: 929,475	• Gross ticket sales since opening: \$14, 453,202	

According to the Association of Performing Arts Presenters' latest benchmark survey, universities average a 33 percent subsidy of their entire operations. In contrast, CNU's Ferguson Center for the Arts has been operating at a small profit for the past six years.

CNU made an intentional decision to hire professional talent to run the facility and book the entertainment. Early enthusiasm for the new venue caused CNU to overlook market feasibility studies about the number of professional shows it could support. Subsequently, season offerings were right-sized, dropping from 85 professional shows to 35 to 40 each year. The Ferguson's staff has learned to listen to the market, booking more pop music concerts and less dance and classical music. More shows are now rentals, and as the renting facility, CNU receives a share of the show's profit. Similarly, the university has invested in equipment purchases, rather than rentals, enabling them to recover expenses by renting back to other facility users.

Most important was an early decision to maximize auxiliary funding, such as ticket sales, fundraising and event fees, and not rely on the commonwealth of Virginia's general fund for the majority of financial resources. As Biddle says, "You are less of a target."

They also have been savvy to cater advertising messages to markets by ZIP code, using viral marketing, Facebook, and blast emails rather than expensive traditional print season catalogues.

Some lessons were painful. The Ferguson Center's staff has shrunk from its earliest days, and they have learned to share staff positions with other departments. For example, graphic artists also serve Communications and Public Relations, and custodial staff work in both the academic side and the performance halls.

As intended in its vision, the Ferguson Center has become a cultural beacon for the Peninsula in the Hampton Roads region of Virginia. While regional data has been difficult to quantify, the first season's economic impact was projected to be \$1.5 million in restaurant expenditures and 5,600 hotel room nights for performers and technicians. The *Daily Press* reports anecdotally that local restaurants experience an influx of diners on performance nights. The facility creates jobs for students and staff. Upon opening in 2006, Newport News Mayor Joe Frank said, "This is one of the more exciting things to happen in Newport News in a generation. It signals the transformation of the community as well as the university and the region. It is a world-class facility designed by world-class architects. It is going to mean a lot in terms of retaining residents in the community and attracting new businesses."

It has become a destination, having hosted 276 performances since 2006, and 1,694 public events. And as Kingston told the *Daily Press*, "Quality of life counts as an important part of our economic development message," signaling a shift in image from a blue-collar to knowledge-based economy.

Community Outreach

The Ferguson has created other arts synergies within the community. Strategic relationships include the American Theatre and a program "Arts for All," which reaches 25,000 students, mostly at-risk. In 2007, the City of Newport News gave the theater department a \$25,000 grant to produce Shakespeare's "The Tempest," because of its ties to Christopher Newport, for whom the city is named. Community groups rent spaces for receptions, conferences, workshops and meetings, and local arts groups perform there.

The facility is a bridge to the community, making friends for CNU and softening public perceptions of the university. Biddle says, "CNU has benefited greatly. We use a very small amount of the university general fund to operate a major public relations vehicle for the school."

Conclusion

The arts can be a great energizer for the campus and its host community, and facilities play a role. Beyond educating traditional arts majors, venues like the Ferguson Center for the Arts can inspire non-arts student to appreciate and support the arts, encourage interdisciplinary collaboration and inspire future artists. Great design, inventive programming and sound business decisions can lead arts venues to profit. Just as importantly, arts facilities can deliver on reputation, enrollment, profit and community relations.

...

Robert V. Reis, AIA, is a design principal at Hanbury Evans Wright Vlattas + Company; Deborah Marquardt is a writer, editor and public relations director at Hanbury Evans; Mark Reimer is director of music at Christopher Newport University.

Endnotes

- ¹ At Christopher Newport, spaces like lobbies and the outdoor amphitheaters multi-task as spontaneous performance venues and fund-raising facilities, putting every square inch of the facility in play.
© CNU
- ² James Madison University's Forbes Center unites an expanding area of campus to the historic core via a tunnel, directing pedestrian traffic from a parking garage, through the building and safely under a major highway.
© Robert Benson Photography
- ³ At the University of South Florida's new School of Music, a "lyrical wall" unites the building's various venues and provides places for students and faculty to gather.
© Robert Benson Photography
- ⁴ A sweeping colonnade has identified the Ferguson Center for the Arts as an iconic building, creating positive impacts on university branding, student attraction and retention. The siting of the facility creates an "arts corridor" in the community.
© Robert Benson Photography

STREAMING MUSICAL PERFORMANCES AT INSTITUTIONS OF HIGHER EDUCATION: A PRACTICAL LOOK AT THE BENEFITS, REQUIREMENTS AND IMPLEMENTATION

As colleges, universities and other institutions continue to look at new ways to reach and expand their audiences for musical performances, the concept of live and on-demand streaming has surfaced as a viable option. While several schools have employed this practice for years, it certainly is not being used by the vast majority of institutions of higher education. It remains uncertain whether this can be explained by a perceived difficulty of implementation; the inherent costs for equipment, bandwidth and personnel; or confusion over royalties and licensing. However, each of those issues is frequently misunderstood and some of the perceived barriers are simply that – perceived. With proper planning and careful consideration of the various alternatives available, most schools can leverage streaming technology to suit their needs and purposes.

This article will look at the practice and benefits of streaming musical performances, both live and on-demand, with a focus on the logistical requirements, technical operations, user interface and licensing requirements, in addition to the consideration of streaming in-house or through a third-party vendor. The goal is to demystify the streaming process and to provide the basic knowledge required to pursue this venture at any institution, regardless of size or resources.

Why Stream?

The benefits of streaming live or on-demand musical performances will vary from institution to institution, but following are some key possibilities:

1. To reach users who cannot attend performances
For years, college and university athletic departments have streamed their games, largely so supporters who live hundreds or thousands of miles away can still feel connected to the school. There is no reason not to apply the same model to music performances to allow family members of student-musicians, alumni, donors and other supporters the ability to engage with a presentation they would otherwise not be able to attend.
2. To reach new users and supporters
Streaming performances also allows institutions to reach users who might otherwise not be aware of a specific musical ensemble or performance. For instance, a college's alumni relations department might send out a marketing email for an upcoming performance.
3. As a recruiting tool
For institutions looking for an edge in recruiting student-musicians, offering live or on-demand streaming can provide potential ensemble members with a glimpse into the group, while also providing them with the knowledge that their own family members and friends will be able to access their future performances even if they cannot attend.

4. To create an online library

Over time, institutions can develop and maintain a “living” library of their performances, allowing users to search and access any number of past performances.

5. To further musical research and academic dialogue

A scenario in which a conductor or student could access performances of any number of works, from any number of institutions, would undoubtedly lead to a more collaborative and rewarding learning environment.

LOGISTICAL REQUIREMENTS

In its simplest form, there are six requirements for producing live streams: (1) a high-speed Internet connection, (2) a video source, (3) an audio source, (4) an encoder, (5) a streaming service and (6) a method for users to access the stream.

1. High-speed Internet connection

The bandwidth (or, for practical purposes, the Internet speed) requirements for live streaming are dependent on the desired quality and bit rate of the stream. Lower quality streams can be transmitted with data rates as low as 300 Kbps, while high-definition (HD) streams are generally transmitted at rates of 1.5 to 3.0 Mbps. There are several websites (such as www.speedtest.net) that measure Internet connectivity. It is important to remember that the upload speed (as opposed to the download speed) is the key measure. Many Internet service providers, for example, provide download speeds of 10 Mbps or greater but have upload speeds of less than one Mbps. Campus networks tend to have less discrepancy between download and upload speeds, although running a speed test is the best way to verify that data. It is also advisable to check the speed at various times and on different days to see if network conditions change under certain conditions (for instance, more students might be online and saturating the network at night).

Even if upload speeds are sufficient, there can still be network packet shaping or other quality assurance controls in place that might result in bandwidth throttling. Network or IT administrators can often set up rules for streaming and guarantee priority for streaming traffic. For institutions working with a third-party vendor, it can be very helpful to acquire the IP addresses of the vendor’s streaming servers, so network administrators can look for patterns in inbound and outbound traffic and prioritize traffic for the streams. Firewalls can also come into play when trying to transmit a stream to an off-campus streaming server. Sometimes, getting around firewalls is as simple as making a port change. For example, some vendors will use a streaming URL in the encoding software that looks similar to this:

`rtmp://streamingserver:1935/streamname`

In this scenario, the encoding software attempts to transmit the stream over port 1935. If the transmit is unsuccessful, simply changing the port to 80 (commonly reserved for Web traffic and thereby more “open” on most networks) can allow the transmission to reach its destination.

In this day and age of cellular broadband connections and 3G/4G hotspots, it is possible to provide a live stream even if the venue does not have sufficient bandwidth. However, it becomes even more important to run exhaustive speed tests before the event, and there is no guarantee (especially with cellular providers) that conditions will remain consistent. Even if a 3G connection shows bandwidth upload speeds in the neighborhood of 1.0 Mbps, it is highly advisable to stay away from those connections. Many 4G connections, however, can provide upload speeds of 5 Mbps or greater.

The best solutions will include redundancy wherever and whenever possible. So, even if a campus network has been identified as the primary vehicle for the stream, having a backup option (such as a 4G hot spot) is strongly suggested.

2. Video source

At minimum, a single camera is necessary for a video stream. For most institutions, this will suffice, provided the camera has the ability for optical zooming. Generally, the camera must be connected to a computer via a FireWire port or capture card, although a USB connection will suffice in certain cases, depending on the encoding software requirements. Some software will even work with IP-based network cameras, which can be helpful for venues that have permanent, static (or remote-controlled) cameras. Obviously, the quality of the video stream is partially dependent on the quality of the camera. While a consumer-grade camera might be acceptable, it is best to use “prosumer” or professional-grade cameras for high-quality streams. A mid-range professional-grade camera will generally cost between \$2,000 and \$3,000. It is also important to verify what outputs the camera includes. Several of the mainstream encoding software options require FireWire outputs, but most newer consumer-grade cameras have eliminated FireWire (in favor of USB and HDMI). Many schools have made the unfortunate mistake of acquiring cameras before determining compatibility with the encoding process.

Depending on the software and hardware being used for streaming, it is often possible to incorporate multiple cameras into a broadcast. Some schools might prefer this functionality if they wish to provide a more professional broadcast. For example, one camera might be trained on the orchestra or choir, while the other is focused on the conductor. This, of course, introduces several new variables into the mix, not the least of which is the requirement for a computer with multiple FireWire buses or a capture card that can ingest multiple sources. Blackmagic and Osprey are two vendors that provide several capture cards that allow for the use of multiple standard- or high-definition cameras.

As an alternative – but generally more expensive option – an external video mixer, such as a NewTek TriCaster, Digital Rapids TouchStream or Sony

AnyCast can be used to mix multiple video feeds. These devices can provide other benefits, as well, such as on-board production software, but they certainly come at a price. Newtek's newest TriCaster model, the 850 Extreme, costs approximately \$30,000, although Newtek does offer a low-end model with educational pricing under \$5,000.

3. Audio source

The audio is the heart and soul of any musical streaming performance, so careful consideration of this variable is a must. Most venues are already pre-wired for sound and have a sound board or mixing console. Mixing the audio into the stream is as simple as connecting a cable from the output of the mixer or sound board into either the video source (the camera) or the encoding hardware (the computer or other device). A balanced, stereo cable will provide the best quality. If the venue is not equipped with a centralized sound system, a method must be devised to digitally acquire the audio in a manner that is going to best preserve and enhance the quality. While the intent of this article is not to provide a thorough explanation of how to best isolate and mix audio, there are many resources devoted to this topic.

When it comes to streaming music performances, the audio quality is arguably just as important (if not more so) than the video quality. While an audio bit rate of 64 Kbps is generally acceptable for streams with only spoken audio, it is highly suggested that a bit rate of at least 128 Kbps – and preferably 256 Kbps (or greater) – be utilized. Only then will the end-user be able to appreciate the full tonal range of the performance.

4. Encoder

An encoding solution is required to convert the digital video and audio sources into a feed that can be transmitted to a streaming server. Generally, encoders fall into two categories: hardware encoders and software encoders. Hardware encoders, such as the Newtek, Digital Rapids and Sony devices mentioned above, are generally more expensive but include powerful production tools. On the other side, software encoding solutions are much more common and affordable (or even free) but require a separate computer to run the software. The most common software encoders are Windows Media Encoder and Flash Media Encoder, though there are other options that can provide more flexibility. For instance, Telestream's Wirecast software (the pro license retails for \$995) offers a number of added benefits: video can be encoded in either Windows Media or Flash formats, multiple streams can be sent simultaneously, production effects such as lower-thirds and graphic overlays can easily be inserted, and pre-recorded clips can be imported and played back at any time.

5. Streaming server

A streaming server ingests the stream from the encoder and relays, or

mirrors, it back to the user. Unlike standard Web servers, a streaming server is configured to transmit live data (or packets) in real time. Several colleges and universities host their own streaming servers. While the advantages to a music department include cheap or free bandwidth – since the institution has already paid for it – and conceivably more control over the process, there are also disadvantages to using a campus-hosted solution. In many cases, a campus network cannot handle the bandwidth required to deliver a stream to a given number of users (for example, if 200 users connect to a stream with a bit rate of 1.0 Mbps, the network must support a throughput connection of 200 Mbps, which can saturate the institution’s network “pipe”). Additionally, campus network administrators are often not able to provide live support when necessary. Many (if not most) campus musical performances occur on nights or weekends, when campus IT personnel may not be available.

The alternative is to partner with a third-party vendor. Some vendors will simply provide a hosted server solution and the bandwidth, which lends a do-it-yourself feel, while other vendors will offer end-to-end solutions which include server hosting, bandwidth, support and a front-end interface for users to access the streams.

6. How do users access it?

Having the highest-quality cameras, the fastest Internet connection, a robust streaming server and plenty of personnel mean nothing if there is no way for the user to access the stream. Again, there are different schools of thought on this topic, and much of the conversation retreats to whether the streams are hosted in-house or through a third-party provider.

For institutions that host their own streams, the stream is almost always “embedded” in a page on the school’s Web server. This is achieved by pasting some HTML code onto a Web page – the code informs the Web server what to display and where on the page to display it. The main advantage is simplicity, though an additional benefit can be the inherent compliance with licensing requirements (see subsequent section on licensing).

Third-party providers will often provide a standalone platform or player for the institution. Depending on the provider, this player can often be custom-branded and serve as separate “channel.” Some schools even register custom domain names, such as johndoemusiclive.com and point the domain name directly to the URL for their interface. Other benefits of this method generally include a searchable database (allowing users to look for past, archived performances) and built-in support tools for end-users who might be experiencing technical difficulties.

Many users will attempt to access content over mobile and other platforms, another benefit in partnering with a provider. Some vendors already deploy solutions which allow streaming in multiple formats, so users can access content on computers, phones, tablets, Internet-enabled TV devices and more.

A Word About HD Streaming

HD is a buzzword in today's streaming environment. The term has become somewhat loaded over time. Does HD refer to the resolution of the video? The bandwidth it uses? Is it simply digital video instead of analog?

Generally, standard definition (SD) content is referred to as 480i. The "i" stands for "interlacing," which allows for an increased refresh rate without using additional bandwidth to display the image but with the downside of possibly seeing artifacts like flickering. High definition is more consistently labeled with terms like 720p, 1080i and 1080p. Although arguments abound over what is considered "true" HD, 720p and up is generally considered to be an HD frame size.

HD frame sizes have a 16:9 ratio, and this is an area of confusion with HD video. A 16:9 ratio is generally called widescreen; however, there are other ratios such as 16:10 (usually used by computer monitors) that are also widescreen. Speaking generally, HD content is considered widescreen, but widescreen is not necessarily considered HD. For example, a frame with 480 vertical lines could have enough horizontal lines to end up with a 16:9 ratio; however, 480i/p is not considered an HD format, so just being in widescreen is not enough to be HD.

It is also important to understand that the pursuit of higher quality may have unintended consequences. As established earlier, one of the key considerations for video streaming is the sustained bandwidth needed to support the stream. A frame of 1080p video is going to have an incredibly large number of pixels compared to an SD 480p frame. This means two things: (1) the client encoding the video will need sufficient upload bandwidth to send the extra data, and (2) the end-user will need sufficient download bandwidth to receive the extra data. Most HD streams require a transmission rate of at least 1.5 Mbps, which is a dramatic uptick over the bandwidth used for standard broadcasts.

Many providers implement variable or adaptive bit rate streaming, which automatically adjusts the quality of the stream for the end-user, based on their bandwidth availability at any given moment. This requires the client to encode several streams (at various bit rates) simultaneously, a prospect that is not always viable. Publishing multiple streams provides ample choice for the end-user, but can prove a logistical challenge for the institution. Each stream requires additional bandwidth, and this may tax the local network beyond what it can reasonably supply. However, methods of dealing with this problem are being developed: streaming server companies are beginning to introduce systems that will allow for a single stream to be re-encoded to other bit rates and sizes on the server and then sent out to the viewer. This means that the institution can send a single, high-quality stream that can be scaled back to various levels of quality and bandwidth use to allow every user to view it.

Personnel

Any venture into streaming requires sufficient personnel to produce the broadcast, operate the camera(s) and mix the audio. In some cases – when there

is a single, fixed camera and the audio feed is pre-mixed, for example – only one person is required to initiate and produce the broadcast. However, for schools or organizations looking to generate more elaborate productions, it is not unthinkable that five or more staff will be required: one to three (or more) to operate cameras, one or two to mix audio and one to coordinate the production. Many schools have had success partnering with their communications or broadcasting departments, and in bringing on students to handle the production elements while gaining valuable practical experience.

Live or On-Demand?

There are three factors that may influence (or limit) a school's decision to offer its streams live, on-demand or both:

1. If schools are concerned that offering live streams will impact the number of live audience members, they might elect to only stream performances after the fact.
2. If bandwidth (as outlined earlier) is insufficient for live streaming, the institution can still record the stream and upload it to the streaming server at a later time.
3. On-demand streaming generally requires less infrastructure from a technological standpoint (it can be as simple as uploading the archive to a Web server – a streaming server is not necessarily required, depending on the format).

Free vs. Pay-Per-View

While most institutions tend to offer their music performance streams to end-users for free, there are vendors who offer the ability to put content behind a pay-per-view paywall. This can offer two distinct benefits: (1) it reduces the possibility that users in the local area will opt to stay home and watch the stream (thereby reducing the gate receipts), and (2) it can generate a new revenue stream for the institution. While the revenue sharing model will change from vendor to vendor, most will offer a 50-50 share. For example, if a school charges \$10 for an orchestral concert and sells 50 passports (for a gross revenue of \$500), the school's take would be \$250. Most vendors will handle everything from processing the user's registration and sales transactions to responding to customer inquiries and issuing refunds, if necessary. It is important to get a copy of the vendor's terms of use for end-users to ensure there is a clear understanding of the expectations and refund policies.

Licensing Considerations

Last, but not least, it is important to consider the licensing and rights issues associated with streaming live and on-demand performances. Institutions or organizations that perform music not in the public domain must pay fees to the companies that license the music. In most cases, these rights will be held by ASCAP, BMI or SESAC. These licensing fees will typically cover the live

venue performance and any online streaming, but only if the stream is hosted by and presented on the institutional website. For institutions looking to utilize a third-party vendor, there will likely be additional licensing fees. Copyright law, especially as it pertains to live and on-demand streaming is still considered a gray area, so it is always advisable to check with an institutional attorney before proceeding with streaming plans.

Conclusion

Streaming, while complex in theory, can be effectively implemented with careful thought and consideration. Institutions must identify what resources they will need to acquire, what personnel will be needed for production, whether they want to offer streams live or on-demand, whether the streams will be available for free or pay-per-view, what licensing they need to acquire and whether their needs call for an in-house solution or for a partnership with a third-party vendor that specializes in streaming.

	In-house	Third-party provider
Support	Relies on IT and network administrators	Many can provide round-the-clock assistance and event monitoring
Bandwidth	Often no cost to music department, but requires a robust pipe for events that will drive large audiences	Can scale as needed and not reliant on one server or network
User access	Usually simple HTML code to provide an embeddable player on the institution's website	Stand-alone portal or channel that can often be branded and customized
Streaming server	Licensed and maintained by university, but can be limited to certain formats	Most can deliver streams in multiple formats to both computers and mobile devices
Cost	Usually free (unless IT departments pass on cost for streaming server or bandwidth)	Charged either on data transfer or a per-event basis (some providers also offer "unlimited" plans)
Rights fees	Generally covered by existing ASCAP, BMI and SESAC agreements	Can require additional fees if content is not hosted on institution's website
Free vs. pay-per-view	Can only offer free in most cases	Many can provide the infrastructure to process credit cards and share revenue with the institution

...

Ryan Ermeling is the founder and president of Stretch Internet, which provides streaming services to nearly 300 colleges and universities.

MAKING PRACTICE PERFECT: EFFECTIVE MUSIC PRACTICE ROOMS

Most music educators would agree that practice is the cornerstone of a musician's development, whether as a solo performer or member of a large ensemble. Recognizing this, higher-education institutions usually offer dedicated practice rooms intended for individual or small group practice sessions and lessons.

What makes a music practice room effective? Because music-making relies heavily on critical listening skills, acoustical considerations are paramount – starting with sound isolation.

Isolating Sound

To be effective, a practice room must adequately isolate the musician from audible distractions while also preventing the musician from distracting others – either in nearby practice rooms or adjacent spaces like rehearsal rooms. When planning practice rooms, focusing on four factors can help ensure optimal sound isolation: adjacencies, doors, wall seams and mechanical systems.

Adjacencies: When practice rooms are directly adjacent to rehearsal spaces, sound isolation is extremely difficult without costly, complex construction. Buffer zones (offices, corridors, storage rooms, etc.) work better than single walls. If possible, locate practice rooms away from rehearsal rooms, or separate them with sound-isolating walls and buffer zones.

Doors: The most common source of sound leakage is the door. It must be properly sealed at the bottom and around the entire perimeter of the door leaf and frame to prevent sound from passing through or entering the room. Mass, density and thickness of materials make a significant difference in how well the door performs acoustically. For long-term performance, doors should feature a cam-lift hinge or a drop-down seal that is durable and maintenance-free.

Wall seams: To eliminate this common source of sound leakage, specify sealed construction in the practice room design. Sound-isolating walls should be full height, with an airtight seal to the building structure at both the floor and roof deck. Also, ensure tight seams around all electrical outlets, ventilation ducts and sprinkler heads. An entire sound-isolated wall can be rendered ineffective by a room-to-room electrical box or a gap as small as a quarter. Along with walls, it is also important that the ceiling structure provides adequate sound isolation.

Mechanical systems: Common mechanical noises like hissing and humming are disruptive and can totally mask the music that students are trying to create in a practice room. HVAC systems are notorious for transferring sounds between rooms, especially between practice and rehearsal rooms. Routing acoustically lined takeoff branches into each room from a supply source located outside the rooms offers the most effective sound isolation. Because making music is a physical activity, the air exchange rate should be double that of regular classrooms. To help reduce any whooshing sounds from this increased air volume and velocity, larger air ducts, vents and grilles are required. Lighting can also be

problematic; certain fluorescent lighting ballasts generate a distracting hum.

Modular Alternative

Considering the factors described above, it is very difficult for conventional construction techniques (involving multiple contractors) to provide a consistent level of adequate sound isolation for practice rooms. In a renovation project, addressing such factors can be highly impractical and cost-prohibitive.

One alternative is a modular, prefabricated music practice room. Because one company controls the design, manufacture and installation of the practice room, its acoustical performance can be guaranteed.

Acoustician David Kahn, principal with Acoustic Dimensions in New York, says his firm has worked on numerous music buildings. “The question that comes up on almost every project is stick-built versus prefabricated practice rooms.” Kahn says his firm has had a lot of very bad experiences with stick-built construction, where the contractor doesn’t do something right or the mechanical system is not coordinated.

“There are so many things can go wrong, and with prefab modules it’s all worked out,” explains Kahn. “We believe these modules can be more cost-effective, because they work.”

Components: Modular practice rooms feature wall panels filled with sound-absorbing material or gypsum panels for added mass and improved acoustical performance. Gasketing between panels and integrated cam-lock devices eliminate the need for permanent fasteners or field-installed sealants. A large window in the door provides the dual benefit of a more inviting practice environment and improved monitoring of student activity. Because of their excellent sound isolation, modular rooms can be installed adjacent to each other or even incorporated inside a larger rehearsal room. Modular practice rooms range in size from small (5’ 8” x 4’ 5”) for one or two students, with an interior area of 19 square feet, to large (25’ 8” x 14’ 5”) ensemble-sized rooms for up to 15 students, with an interior area of 344 square feet. Even larger modular rooms are possible.

Mechanical: By design, modular rooms are isolated from the building’s main mechanical systems. Built-in fluorescent lighting features electronic quiet ballasts to minimize hum. The room’s internal fan exchanges the ambient air every 1.5 to 2 minutes; plenum and ducts feature acoustically isolating construction. For greater comfort, connecting to the building’s HVAC system is a popular option. The sound energy generated by the lighting and ventilation should not exceed the architectural requirements for the quietest theaters.

Assembly: Regardless of the practice room’s configuration or size, the on-site assembly process is the same, usually performed by the manufacturer. A floor rail (or foundation) is laid on the finished floor or subfloor, floating the entire room perimeter on a layer of microscopic open-cell foam. Following the specified floor plan, wall and ceiling panels are erected and locked together. Provisions are incorporated for electrical, communications, sprinkler and

ventilation systems.

This assembly method provides valuable flexibility because the room can be disassembled down to the basic components if necessary. Like a child's Erector Set toy, it can be reconfigured or moved as needs change.

Wenger Corporation, which pioneered sound-isolating music practice rooms more than 40 years ago, estimates that 35 to 40 percent of its modular rooms installed in higher-education facilities are moved in their lifetime, often as part of multiphased construction projects.

Tight budgets often dictate that modular rooms help repurpose existing space until new facilities are realized. In most situations, customers hire Wenger installers to handle the relocation task, which maintains the guaranteed acoustic performance.

Speed of installation and the flexibility of future relocation were both important factors in a large practice room installation at the University of Iowa in Iowa City.

Case Study: University of Iowa Requires Fast Installation, Future Flexibility

In June 2008, flooding of the Iowa River forced the evacuation of the University of Iowa's music building, along with much of campus. Before the start of fall semester in late August, the School of Music was dispersed to 17 leased locations around Iowa City, including local churches, schools and retail buildings. One downtown location, formerly retail space, was quickly outfitted with modular practice rooms.

"We thought of Wenger practice rooms right away and ordered 22 of them," recalls Kristin Thelander, collegiate fellow, professor and director of planning for the School of Music. These rooms were installed in mid-September, just four weeks into fall classes.



University of Iowa Wenger practice room – hallway

"Wenger was tremendous working with us, responding quickly and getting everything put together," comments Thelander. "It was quite a miracle to get them installed that quickly."

In January 2009, the university decided the old music building was not salvageable; long-term interim facilities were needed. University

Capitol Center (UCC), a downtown location formerly home to a multi-screen movie theater, was identified as the largest interim solution. Neumann Monson Architects of Iowa City helped plan the two-story site.

Project timing was compressed by a mandate from the Federal Emergency Management Agency that all interim facilities be completed by mid-August 2009.

"This deadline was a tremendous challenge for the architects, the construction company and for Wenger manufacturing and installing the rooms,"

explains Thelander.

Dwight Dobberstein, principal with Neumann Monson Architects, says Wenger practice rooms were the only way to meet this accelerated schedule. “Building stick-built rooms would have taken a lot longer,” he states. “The Wenger rooms were a known product that already had the necessary sound isolation built in.”

He says Wenger responded with a team of people to design the 44 rooms for UCC and help lay them out to fit within the space. “This was no small task, and Wenger was very good to work with,” says Dobberstein, adding that these modular rooms achieve much more sound isolation than the original built-in rooms. He concludes, “It makes sense that rooms built in a controlled, factory setting offer better results.”

Acoustic Dimensions provided acoustical consulting on the UCC project, led by David Kahn. “With the very tight schedule and nonpermanent installation, we thought this was the perfect application for the modular Wenger practice rooms,” Kahn recalls. The rooms could be assembled very quickly with guaranteed acoustical performance and the university could move the modules in the future.

“The modules can be integrated into the design of the new School of Music building, rather than being thrown away,” explains Kahn. “It made a tremendous amount of sense.”

Thelander agrees. “It’s definitely an advantage that the Wenger rooms can be moved and reconfigured,” she remarks.

Other Acoustical Considerations

When the sound-isolation requirements are met, there are other acoustical considerations for practice rooms. How does the room sound to a musician? Modular practice rooms, with a mix of reflective and absorptive panels, create a more acoustically suitable environment than is possible with untreated gypsum or concrete construction. For example, the mixture of panel types can tune out distracting flutter-echoes caused by opposing hard-surfaced walls. Typical stick-built rooms would require retrofit acoustic treatments to accomplish this.

A modular room’s panel combination also helps create an acoustically “dry” environment with low reverberation times. This enables critical listening – the ability to learn and hear differences in intonation, dynamics, articulation and balance.

However, dry acoustics are not always advantageous, as illustrated by this musical example: Properly trained musicians will adjust how they play to sound the best in each space. If a musical passage should be very smooth (*legato*), a musician will hold each note as long as possible before moving to the next one. When practicing in an acoustically dry practice room, musicians have difficulty achieving this effect; they will not leave any space between notes. Unfortunately, once musicians are onstage in a more reverberant environment, that same musical technique will result in a slurred, muddy sound. In a reverberant space,

a musician should leave some space between the notes, allowing the room's natural reverberance to fill in the gaps and smooth the sound. This will result in a cleaner, more desirable effect.

This acoustical disconnect between a practice room and performance environment hampers a musician's development. In athletics, no one questions why tennis players practice on the tennis courts or why football teams go to the field. It is logical – the best place to practice is where they play. For musicians, practicing in a performance environment helps them hear a truer sound and maximizes the value of the practice session. However, musicians usually cannot practice regularly where they will be performing because individual practice onstage is inconvenient or impractical. On college or university campuses, performance venues are often heavily scheduled.

A Virtual Solution

Advancements in virtual acoustics technology enable musicians to bridge the gap between practice rooms and performance spaces. While inside a modular practice room, musicians can experience a wide range of simulated acoustical environments, including recital hall, auditorium or even an arena. Benefits include accelerated development of critical listening skills; improved articulation, dynamics and timing; and a more enjoyable practice session.

In a virtual practice room, microphones hidden inside the wall panels pick up the musician's sound. It is then digitally processed in real time, amplified and sent back into the room through speakers in the walls. The speakers are positioned both high and low in the room which envelops the musician in sound, removes any sense of speaker directionality and more naturally mimics an actual reverberant performance space.

Along with preset acoustic simulations, the virtual practice room also features a mute setting when an acoustically dry space is desired. Volume controls for each setting allow the user to adjust the energy level returned to the room through the system.

The integrated digital record/playback capability enables teachers to easily evaluate an individual student's instrumental or vocal performance; students also have the opportunity for self-critique. Up to nine sessions can be recorded by the system, totaling 120 minutes. Upload/download capability enables musicians to record a practice session or upload accompaniments.

(This innovative virtual technology – initially only an option in prefabricated modular practice rooms – is now also available through a retrofit kit for existing built-in practice rooms. The retrofit kit is recommended for rooms up to 180 square feet where adequate sound isolation already exists.)

To fund these new practice rooms, some higher-education institutions have successfully tapped into campus technology budgets. At Middle Tennessee State University, funding for practice rooms was augmented by a technical access fee that is assessed each student.

Acquiring this virtual technology was a deciding factor when Boston

University decided to upgrade its practice rooms.

Case Study: Boston University Embraces Future

“When we first considered practice room alternatives, virtual technology was not the highest priority,” recalls Walt Meissner, who at the time was interim dean of the College of Fine Arts (CFA) at Boston University (BU).



Boston University Wenger practice room

“But in the end, this technology tipped the scales in a very, very tight bidding process,” Meissner claims. “Wenger was ahead of the curve against its competition.”

Wenger installed 119 sound-isolating practice rooms in CFA’s basement level in the spring of 2009, replacing built-in rooms that were decades old.

“The previous practice rooms were terrible – they were not soundproof at all,” remembers Caitlyn Perry, a graduate student in flute and music education. “We called it the dungeon down there. The rooms were either too cold or too hot.”

Along with these shortcomings, Meissner says the rooms were not used very heavily because over half of them could barely accommodate more than one person.

“A big part of our plan was creating rooms with chamber music groups and other ensembles in mind,” explains Meissner, noting that even the smallest of the new practice rooms is large enough to accommodate a trio or quartet.

The footprint of the entire practice room area was increased by over 30 percent without significantly increasing the number of rooms. One reason modular rooms were chosen instead of built-in was because they saved space, which enabled the practice rooms to be larger.

“We’re finding the virtual practice rooms are even more valuable than we thought,” comments Meissner. “Eventually our goal is to install a virtual system in every room.” All the rooms are wired for this technology so it can be added later. Some funding will come from a CFA capital campaign inviting donors to name a practice room.

“Our high-tech rooms are in high demand,” says Meissner. “The technology



Wenger practice room – lounge

makes it easier for musicians to hear and work with each other if the room is a little more live. A room that's really dead doesn't play well and is not a good practice environment."

French horn student Jonathan Craft agrees. "This technology improves the playing environment by making the space more resonant and supportive," he declares. "The recording capability is really useful for providing immediate feedback, either alone or with a small group."

While modular practice rooms are primarily for music practice, a growing number of universities also use them as broadcast/recording studios. Sound engineering and recording courses are increasingly being incorporated into the school of music, rather than mass communication or engineering.

In these applications, two rooms are usually installed side by side – a control room and a recording room. Virtual technology in the recording room can eliminate the need for musicians to wear headphones, instead providing them with natural feedback and the sensation of being in a much larger space.

Competitive Advantage

In the competition to attract music students, Meissner believes adding these new practice rooms was a necessary step for BU. "We felt we were losing out with regard to our practice facilities," he states, adding that students deciding between two similar colleges would likely ask themselves, 'where am I going to be spending most of my time? Will it be in a comfortable place where I can get some serious work done? Are there enough practice rooms to meet my needs?'

Concludes Meissner, "For these students making decisions, we now feel very strongly that our facilities earn us a positive check mark."

Maximizing Benefits

Whether for instruction, individual practice or small-group lessons, practice rooms fulfill a vital role within higher-education music facilities. An understanding of the unique acoustical challenges and available solutions can help maximize the benefits these rooms provide to a musician's development.

...

Denny Meyer is product manager for acoustic products with the Wenger Corporation, a manufacturer of equipment and furniture for music education and the performing arts. During his 27-year career at Wenger he has held various sales and marketing positions along with helping author several Wenger planning guides, including *Acoustic Problems & Solutions for Rehearsal and Practice Spaces*. Meyer has presented planning seminars for music facilities at conferences of the Council of Educational Facility Planners International and Music Educators National Conference. A former music educator, Meyer now sings in a gospel quartet that performs regularly in the region. He can be reached at denny.meyer@wengercorp.com.

Submission Guidelines

The *Journal of Performing Arts Leadership in Higher Education* (JPALHE), published once a year, presents a wide range of topics relevant to visionary leadership in the performing arts in higher education. Topics include, but are not limited to, curriculum development, assessment, goal setting, career preparation, governance, fund raising, technology, retention and recruitment. As a peer-reviewed journal, JPALHE presents articles that are supported by facts and cited appropriately, using the latest edition of *A Manual for Writers of Term Papers, Theses, and Dissertations*, by Kate L. Turabian. Articles for consideration are submitted electronically to the editor and must be in the 12-point font of Times New Roman, double-spaced and no longer than 12 pages. The author's name must not appear on the attached article. Submissions from all countries are welcome, although the journal is published in English. Authors are responsible for securing all copyright clearance.

Each submitted article is forwarded by the editor to three members of the Editorial Board, with at least two of the three members specializing in the subject area of the article (dance, music, theatre). The deadline for submission is October 1, and notification of acceptance, deferral or denial is November 1. The accepted articles are posted on the website on January 1.

Submissions are to be sent via email, with the article as an attachment, to:

Dr. Mark Reimer
reimer@cnu.edu

Dr. Mark Reimer
Journal of Performing Arts Leadership in Higher Education
Ferguson Center for the Arts
Christopher Newport University
Newport News, VA 23606
(757) 594-7074

CELEBRATING OVER 135 ALL-STEINWAY SCHOOLS



All-Steinway Schools demonstrate a commitment to excellence by providing their students and faculties with the best equipment possible for the study of music. That is why the pianos owned by these institutions – from the practice room to the recital hall – are Designed by Steinway & Sons.

CONSERVATORIES

Oberlin Conservatory of Music (Since 1877*)	Academy of Vocal Arts	Leeds College of Music – Conservatoire (England)
Yale School of Music (Since 1897*)	Central Conservatory of Music, School of Piano (China)	Royal Welsh College of Music & Drama (Wales)
Cleveland Institute of Music (Since 1920*)	China Conservatory of Music, School of Piano (China)	University of Cincinnati – College Conservatory of Music
Curtis Institute of Music (Since 1924*)		

COLLEGES AND UNIVERSITIES

Ball State University	High Point University	Portland State University	University of Denver
Belmont University	Indiana University of Pennsylvania	Principia College	University of Florida
Bemidji State University	James Madison University	Radford University	University of Georgia
Blue Ridge Community College	Kennesaw State University	Rowan University	University of Maryland
Bluffton University	Lake Michigan College	Royal Holloway College	University of Melbourne
Cardinal Stritch University	Lewis and Clark Community College	University of London (England)	Faculty of Music (Australia)
Carl Sandburg College	Lindenwood University	Saint Mary's University of Minnesota	University of Minnesota - Twin Cities
Carnegie Mellon University	Liverpool Hope University (England)	Santa Fe College	University of Minnesota - Morris
School of Music	Lock Haven University of Pennsylvania	Seton Hill University	University of Montevallo
Chestnut Hill College	Loras College	Snow College	University of South Africa
College of Mount St. Joseph	Martin Methodist College	Southern Adventist University	University of South Florida
Columbus State University	McLennan Community College	Southern Utah University	University of Tennessee at Martin
Concordia University - St. Paul	Middle Tennessee State University	Southwestern Assemblies of God University	University of Utah
Converse College	Midland College	Spelman College	University of Victoria (Canada)
Cuyamaca College	Millikin University	Spring Hill College	University of West Florida
De Anza College	Missouri Western State University	State University of New York - Potsdam	University of Wolverhampton (England)
Duquesne University	Montclair State University	Crane School of Music	Utah Valley University
East Tennessee State University	John J. Cali School of Music	Teachers College - Columbia University	Vassar College (Since 1912*)
Fairfield University	New Jersey City University	Texas A&M International University	Waldorf College
Florida Gulf Coast University	Nicholls State University	Texas Christian University	Weber State University
Franklin & Marshall College	North Greenville University	Tulane University	Webster University
Franz Liszt College of Music Weimar at Kangnam University (Korea)	Oklahoma Christian University	Union College	West Chester University of Pennsylvania
George Mason University	Oklahoma State University	University of Alabama at Birmingham	West Valley College
The George Washington University	Oral Roberts University	University of Arizona	Westmont College
Georgia College and State University	Pellissippi State Community College	University of Arkansas	Wheaton College
Gustavus Adolphus College	Philadelphia Biblical University	University of Central Florida	Youngstown State University
Hastings College	Pomona College	University of Central Missouri	

OTHER SCHOOLS OF DISTINCTION

Cicely L. Tyson Community School of Performing & Fine Arts	Levine School of Music	Pacific Northwest Ballet and School
City of Edinburgh School of Music (Scotland)	Longwood Nagakute School of Music (Japan)	Philadelphia High School
Conservatori Liceu (Spain)	Loretto School (Scotland)	for the Creative and Performing Arts
Cranbrook School (Australia)	New Yorker Musische Akademie im CID	Pittsburgh's Creative & Performing Arts
Cushing Academy	Braunschweig (Germany)	Magnet School
Episcopal High School		Raleigh Conservatory of Music
Gould Academy		Rimsky-Korsakov Music School (Russia)
Hamburger Konservatorium (Germany)		Somerset College (Australia)
Henry Mancini Arts Academy at Lincoln Park Performing Arts Center		Syddansk Musikonservatorium & Skuespillerskole (Denmark)
Kronberg Academy (Germany)		Valley Christian Schools
		Wellington School (England)



STEINWAY & SONS

www.steinway.com

* Denotes an All-Steinway School for over 85 years.