

# Virginia Commonwealth University **VCU Scholars Compass**

Theses and Dissertations

**Graduate School** 

2015

# Teaching Technical Theater: Learning, not just Doing

Christian J. Hershey Virginia Commonwealth University

Follow this and additional works at: https://scholarscompass.vcu.edu/etd



Part of the Other Theatre and Performance Studies Commons

© The Author

## Downloaded from

https://scholarscompass.vcu.edu/etd/3960

This Thesis is brought to you for free and open access by the Graduate School at VCU Scholars Compass. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of VCU Scholars Compass. For more information, please contact libcompass@vcu.edu.

© Christian J. Hershey

2015

All Rights Reserved

## **Teaching Technical Theater:**

Learning, not just Doing

A thesis submitted to

In partial fulfillment of the requirements for

The Degree of Master of Fine Arts

At Virginia Commonwealth University

By

Christian J. Hershey

B.A. St. Mary's College of Maryland

April 1998

Dr. Noreen C. Barnes

Director of Graduate Studies, Theatre

Virginia Commonwealth University

Richmond, VA

## Acknowledgements

The author would like to thank his father for starting him on this path, and his mother for seeing him through it. In addition, there are several other people to whom I would like to extend my thanks. First, Dr. Noreen Barnes for helping me during my entire process as I changed paths and stumbled onward. Alan Williamson, with whom I could often commiserate about the challenges we have in teaching this topic, and all of the other technical faculty I have learned from and worked with over the years. Finally, David Fura whom I told those many years ago when I left undergrad and he asked what my plans were, and I said "Anything but teach".

## Table of Contents

Abstract	iv
•	
Chapter 1 - Introduction to Issues within Technical Theatre Education	1
•	
Chapter 2 - The Source of the Issue and Ideas for Resolution	7
•	
Chapter 3 - Following through and Keeping it Engaging	17
•	
Chapter 4 - Conclusion	24
•	
Resources	26
•	
Bibliography	44
•	
Vita	47
<u>•</u>	

#### Abstract

#### TEACHING TECHNICAL THEATRE

By Christian Hershey M.F.A

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Fine Arts at Virginia Commonwealth University.

Virginia Commonwealth University, 2015.

Major Director: Noreen Barnes, Director of Graduate Studies Theatre

I have seen a trend in the teaching of technical theatre towards a more practical and less theoretical education. This has brought about a change in viewpoint by professional technicians, as well as students, in regards to an academic degree. Due to this change and the rise of student debt, the impulse has been to encourage going directly into the field and learning the craft there instead of spending four years in an academic institution.

There has also been increased pressure on theatre departments to produce larger and more involved shows; both to draw in new students and to justify budgets for productions, particularly musicals. This has led to a greater rate of burnout for graduating students who have spent less time in actual classes than in working on productions.

In studying and working in the academic environment I have made insights into ways in which these problems may be alleviated and academic training can remain relevant to the demands of the professional world.

#### Chapter One:

#### Introduction to the Issues with Technical Theatre Education

The premise for this thesis came about from a variety of personal observations while working as an academic in a professional environment. Initially, as a stagehand working on staff in educational environments, and not directly involved in the maintenance and running of the theatre programs themselves, I had had an outsider's view of the evolution of academic theatre for about a decade or so. The events that truly brought this idea into focus occurred in just the past few years, while I was pursuing my M.F.A.

While working, both in the strictly professional venues as well as the more educationally oriented ones, the conversation of what one is doing in their off time comes up quite often. In the professional venues I have noticed a disturbing new trend in conversation. When I mention my pursuit of an MFA in order to teach, no longer is the conversation about which schools produce the best technicians, or what to course of study to follow, but more a debate about why one would want to go to a post-secondary school at all. It appears the growing consensus is that one can gain as much or more experience by simply working in the field for the same four years; and, in addition, make money versus graduating into debt. For me, I think the most worrisome aspect of this concept is that I can understand this perspective.

I'm not going to go into the crippling level of loans most students are forced to carry upon graduating into a field in which most jobs are not highly paid; I will instead discuss the experience and skill training in the more common academic situations I have observed. Many schools have a limited number and level of production classes they are offering, and are instead relying on the premise that the students can learn primarily by doing; through working in production positions. Often offering only one or two courses in a discipline as I will go into later. One of my main concerns with this approach is, to those outside, it can seem that at its most fundamental level, an education in the arts is merely a form of vocational, on the job, training. In addition, this practice can also appear to reflect the belief that the technical side of our craft is comprised of basic skills that do not need, nor can benefit from, an advanced course of education. I believe that neither of these perceptions are true and I fear that they can damage the future of our craft.

Questions about the validity of the system aren't just coming from the outside either. In my time working at various universities, as both a staff member and a student, I have noticed something similar coming from the student body. They are beginning to feel that their main purpose at their school is as a resource to be mined from; sensing that their education has become secondary to their utility to the University. In that they are a source of income or free labor as opposed to being valued product. As that feeling grows, their sensitivity to feeling underappreciated grows as well. We, as their primary guides in this area, need to be particularly aware of how the students view their place in the department and the University as a whole.

All of this seems particularly endemic in the technical theatre programs that I have witnessed and lately been researching for this thesis. The added pressures to produce high quality productions to provide operating revenue for many departments (both directly and

indirectly) has shifted the focus towards realizing productions and away from exploring new ideas and spending time on course work. At one university, Ithaca College, there are thirty-eight classes that would fall into a technical theatre track (including Stage Management). Of those, eleven are purely practicum based classes, and many of the others have practicum components. (ithaca.smartcatalogiq.com) This can have the unfortunate side effect of also shifting production faculty's attentions to production needs over classroom requirements. Many curricula are now often based around show positions or show obligations with lecture time and non-show based education fit in when possible. These few remaining course obligations are then often sacrificed when they come into conflict with the needs of the production as the show is often viewed as having more value than the course content. I have sadly seen a professor on more than one occasion require a student to drop a class as it limited their ability to perform a show duty that was desired of them.

In that same vein a basic overview of many major institution's course catalogue will present you with another hurdle many technical theatre students face: that of a limited number and range of courses from which to choose. This is not an arts based issue, it is more focused than that, as the performance side of the course listings does not seem to suffer from a similar deficit. In fact, as shown in the following survey, there are often two or three performance classes for every technical class offered. Many of the courses presented to the technical students are basic in nature and are mostly focused on job specific training, and that is where I believe a great measure of the problem lies. This is not to say that the learning of the basic skills inherent to our craft is not of value, but that those skills should merely be a basic step along the path toward advancing the art, or we will promote a world exactly as the detractors in the professional fields I mentioned earlier are claiming.

I have done a survey of the course lists for the top fifteen universities for theatre, according to the *Princeton Review*. I believe, that while it may not be the best authority, it is valid as it is one of the first place parents look and represents what the outside world views as our best.

College/University	Degree offered	Number of Production Classes Listed in Course Catalog	Number of Performance Classes Listed in Course Catalog
Wagner University New York City, NY	B.A.	20	20
Carnegie Mellon University Pittsburgh, PA	B.F.A.	118	122
Emerson College Boston, MA	B.F.A.	33	46
Ithaca College Ithaca, NY	B.F.A.	33	50
Indiana University Bloomington, IN	B.A./B.F.A.	22	30
Stephens's College Columbia, MO	B.A./B.F.A.	23	24
Elon University Elon, NC	B.A.	9	21
Kenyon College Gambier, OH	B.A.	4	14
SUNY Purchase Purchase, NY	B.F.A.	81	118
Vassar College Poughkeepsie	B.A.	8	19
Northwestern University Evanston, IL	B.A.	20	30

Interesting to note that the list is fairly evenly split between those that offer B.A.'s and those that offer B.F.A.'s. Amongst those, there seems to be little correlation between the course offerings and the degree offered. Some of the schools listed are not known for their technical prowess and may offer no specific technical theatre focus for their students. Why then do I include them in the schools I am surveying? One reason is that I am stating my case based on an overview of schools that are known for their theatre degree in general. The second reason is that I wanted a listing from as neutral a source in regards to my topic as possible as I feel that even in a school with less technical emphasis the ideas I am presenting remain valid. In addition, as these schools are remarked upon for their theatre education, in order to maintain this status I feel they need to be at least striving towards a balanced production process. If one is to have world class performers, presenting their work in a classroom under fluorescent lighting and in whatever they wore to class, will hardly do their preparation justice much less elevate it to any extent. One of greatest strengths of academic theatre is the opportunity to learn to understand the underlying principles of the technical fields and how they interact with the performers, not just how to get through running a show. Even in a smaller school with less technically oriented students and fewer courses offered, there is still the opportunity to provide a higher caliber education than one would receive in the field.

Interestingly over the course of researching this paper, the numbers have shifted to a more even stance. When I started, production oriented courses held barely a third of the total offering, the ratio is now closer to forty percent on average. Yet even in the schools that provide a more balanced total offering of courses, such as Yale, those courses are not offered all the time. In Yale's past years offerings, the ratio for production to performance courses was thirty seven to

ninety four. Part of this is due to the fact that there are, in general, fewer production faculty than performance faculty (to an average ratio of 3.75 to 1 in the schools I surveyed). As each faculty member is limited in the number courses they can teach per semester; and show positions tend to count as teaching exemptions, there are fewer course openings available.

Of those, the majority of the technical classes were basic in title and scope, such as Vector Works (SUNY Purchase TDT 3520), and intended to give the students a basic start. This is contrasted with the performance classes that can get very specific in focus, *Theories of African* Diaspora: African/Caribbean Performance (SUNY Purchase THP 3220). Or take the Temple University current course catalog as another example (Ithaca.edu). They teach three specific sub techniques of acting, not counting movement, speech, etc. in addition to three levels of basic acting classes. Production tracks in the same catalogue are represented by typically only one practical class and one design class. Both performance and production have the same basic courses, but performance often then has another level of coursework beyond that that expands into the styles and nuances of the field. Could there not be a course along the lines of Professional Rigging: Arena vs Stage settings where the differences in both techniques and needs were discussed as well as the advanced mathematics and control systems consistent to both. I don't propose that courses like this be offered consistently, but the acknowledgement of this level of specialization in the technical fields would go a long way towards putting graduating students in an elevated position vis a vis their field trained counterparts. I.A.T.S.E. recognizes this need for specialized training itself by offering courses such as Concert Spot Class at the Verizon Center where interested members can train how to "run a spot light at the Verizon center" in a low stress environment." (iatselocal22.com)

In academia our goal should be to provide our students, no matter the course of study, with the tools to not only *practice* their craft but to *understand* it. They should be placed in a position to lead when they graduate, not merely join the rank and file. To ask them to figure it out as they go is to have them reinvent the wheel in every production, a practice not only damaging to the psyche of the students, by placing an undue amount of stress on them, but it is wasteful in terms of both time and money; of which almost every theatrical enterprise is woefully short. My proposal is that we re-investigate the balance of offerings in what has become the standard panel of theatrical courses and redistribute our efforts to include educating all branches of our craft at all levels. The fact is our craft is much more than the sum of its basic parts. It's what we can create once we have gained understanding and control of these skills that is truly magical. If we focus our classwork at the basic skill level, we are showing potential students the least interesting aspects. It's no wonder scenic painting tends to be one of the most popular of technical classes, it puts the end results in the students hands immediately and shows them what is possible from the beginning.

#### Chapter Two:

#### The Source of the Issues and Ideas for Resolution

These issues I previously stated stem from a theatre department's need to balance the pressures of production with the needs of education. Ideally, there would be unlimited funds to support the cost of production, the maintenance of the program and a full company of faculty and staff. This is rarely the case. Increasingly, universities are cutting funding to many arts and humanities programs. This has led to an increased reliance upon ticket sales to supplement or even to provide the entirety of the yearly production budget. Since this is unlikely to change (and in general the premise of producing viable shows that draw in an audience is not a bad thing); a working solution needs to be achieved.

Firstly the determination needs to be made as to the hierarchy of these needs. These may not seem as fundamental as Maslow's; but in the realm of this discussion it is vital to resolve. It is easy and idealistic to state that the needs of the curriculum and thus the students come first; with the greatest share of resources going as directly to the students as possible. Perhaps by building the best facilities with the latest equipment; capable of producing on par with professional venues. As well as including multiple venues to provide ample performance opportunities and of course, any supplies needed for practicing the arts and satisfying course

needs. This will give the students a completely open field in which to grow, with no limitations; not to mention be an attractive draw for new admissions.

Without a strong core of faculty and staff however, these often end up underutilized or just left to gather dust in the back of the room. Too often I have come into a shop and seen equipment that was bought because it was the latest technology, with plans to elevate future productions, but now sitting unused. Proper guidance and training is necessary in order to be able to make the most of whatever resources are available. In addition, I have seen some truly amazing work produced from almost nothing but a vibrant concept and strong execution. It reasons then that a stronger core of faculty will inspire their students to loftier heights; to guide them in showcasing their ideas to the fullest potential. "Poor is the pupil that does not surpass his master" (Davinci, Codex Forster III, 66v). In addition, a well prepared staff will be there to teach students not only the history of their art, but also to train them in the current standards of the professional world in to which they are headed.

Perhaps a department should invest its resources then into building a strong core of faculty and staff who will raise the standards of their students and thus their program. "Like any suitor ... departments seek to garner a desirable prospect (faculty) by advertising their best features. At Hopkins, that courtship has often involved promoting intangibles, such as its culture of collegiality, the high repute of its faculty and the excellence of its graduate students." (Hendricks) So building a strong core of faculty will draw more of the same to the department. Better faculty and staff, and a strong student core, will enable a department to showcase more inspired productions which will help it grow further.

In terms of the productions, just how much of our limited resources do we give to them? On one hand, in an educational environment, it is easy to state that the students or faculty should receive the most as they are the core of the department; the production is often seen as icing on the cake, a way to advertise and justify our existence. This can be true, but it there is school of thought that Howard Bay summarizes as "Classroom tutelage is only an exercise in diminishing returns if it does not run concurrently with productions (161)." Productions can be the crucible in which students test what they have learned and come to trust in themselves. And which of us doesn't know the feeling of pride in putting on a well realized production? To not give the students that experience would be robbing them of one of the great reasons to practice theatre.

It is also true that the productions *are* our advertising and way of showing the rest of the school, our community, and potential students what we can accomplish, and in that regard it needs to be something we put a lot of our department's energies into. What percentage of those resources that are actual funds, physical labor, or conceptual planning, varies from show to show; but there needs to be enough resources available to reveal what we have helped train our students to be capable of bringing to the stage.

So really, the hierarchy of our needs is that they are all equally necessary. The key is that they aren't all as necessary at the same time. The only real solution I see to the dilemma of balancing the needs of production, department, and students, involves building a system that can accommodate each set of needs and allow them to adjust until they can be aligned. As the nature of our art is fluid at its core, with every production having different requirements, this solution needs to be fluid as well.

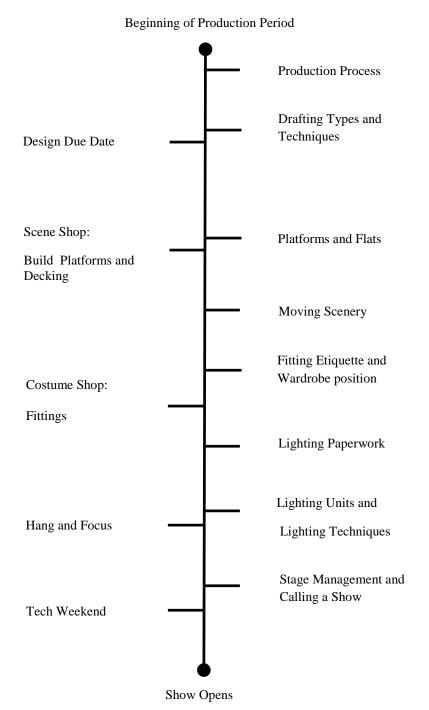
At its core, this comes down to scheduling. Of all our resources, time is the most limited; and the one most apt to come into conflict within the academic system. Class deadlines, holidays, exam periods, etc. all add exterior stressors into the mix.

The first and most important step in maintaining both an educational calendar and a production schedule is to plan them both out at the same time. It may seem like common sense, but too often courses are planned and syllabi created with little thought as to the productions being done. Syllabi are often either produced from a blank template or recycled year after year. This leads to coursework that does not necessarily coincide with or contribute to the production. I'm not saying that courses need to be custom tailored every semester; more that the components and order of assignments in the semester be viewed as blocks that can be shifted around to where they would fit in best. Simple steps like making sure that (using a stagecraft class as an example) the section on Lighting Instruments happens just before the Hang and Focus that they may assist in; or that you make sure the draftings and renderings for the current or previous show are used as lecture aids during the appropriate lecture. The next step further would be to look at the construction schedule in the various shops and shift the lectures on the topics to coincide to a period just before or after. Since lecturing about revolve systems usually takes less time than building and installing them, there is a window that the lecture schedule and the build schedule should be able to align within.

This is an example of a generic production calendar with a few deadlines selected with appropriate lecture schedule referenced:

## **Production Process**

## **Corresponding Lectures**



A good course plan needs to follow a progression from basic concepts into the more complex or involved practices of that particular discipline. It also needs to include both a lecture, and strictly informative portion, as well as a practical or demonstrative portion. This is true of courses on all types of subject matter; yet technical classes are often viewed differently. In order to maintain the focus and drive in a production, the technical courses tend to let the distinction of the lecture aspect diminish in favor of a "guide as they do it" approach to teaching the subject matter. While there is great debate over the value of a hands-on learning style versus a lecture-based learning system, there is very little in the way of definitive results available. Many of the studies I have read concerning teaching techniques (Marchese and Barkley among others) come to the conclusion that the efficacy of different styles of teaching is dependent upon the learning style of the student. Stating basically that different people learn more or less efficiently from different teaching styles. Now, one could hardly argue that theatre draws homogenous group of mindsets, and thus it is reasonable to speculate that a multifaceted approach would permit the greatest level of retention in the technical students and in students in general. In fact most teaching guides propose various exercises and lecture types that engage multiple styles of learning.

Despite that viewpoint, most technical students are informed either directly from their faculty, or indirectly by the limited number of course options, that they can "learn by doing it" and that the process of fulfilling a production role is analogous to and just as effective as a guided course of education by a trained and experienced professor. Put that way, I find the position hard to defend as being advantageous over working in the field of study. Even if I were to subscribe solely to the hands-on approach to learning and believe that lecture and study time were extraneous, there is an important distinction between that and the "show position"

approach. A practical course of education needs to rely upon "facilitating learning by *designing experiences* through which students acquire new knowledge and develop new skills." (Teaching Learning Styles, RIT.edu). The teacher needs to be setting up the learning environment and tailoring it to the various students involved in the course and their respective knowledge and experience levels. Counting on a show to design itself and its needs around the various students involved in its realization is asking to be disappointed. In such a situation, a student attempting to solve problems and accomplish goals on a production deadline is apt to fall back on skills they already possess and feel they can rely upon rather than take the time to explore different approaches or employ untested methods. There is an immense risk of failure in that approach with minimal reward for going out of their way to think outside the box.

A professor can watch over the entire class and occasionally step in to guide the student; presenting solutions and steering the student in a particular way. There is a risk in this in that any ideas introduced by the professor during this project will likely be just a variation in technique versus learning a new approach. This is also likely to be an alteration in pattern instead of a new process or solution as it is done on the fly and for a specific circumstance. Had the same ideas been presented as part of a planned exercise in variations on a basic technique, with strengths, weaknesses, and reasons for choosing the different methods; a student would have the opportunity to add an entire new process to their repertoire instead of a single potentially misunderstood concept. This brings up the other risk of learning under pressure: there is very often insufficient time to explain the reasoning behind the decisions made and the methodology to it, which can often lead to a lack of comprehension about the specifics of a process. A student may be aware of their lack of a complete grasp of a topic and thus shy away from using it in the future for risk of failure; or if they are unaware of their incomplete

knowledge may make assumptions that could lead to future failures as well. For example, one situation I have witnessed myself comes from the growing practice of using <sup>3</sup>/<sub>4</sub>" plywood as an alternate to 1x4 as a framing material. This is perfectly acceptable in the context of framing a flat, but if the student were to extrapolate and use it to replace 1x4 as cross-bracing, the minute it took a lateral load it would collapse. The structural makeup of the material is compromised in that set up, but without explanation that might not be obvious to an inexperienced student.

While one does need time in a lab style setting to properly introduce a student to a concept or idea, a production position is a great place to put learned knowledge to a practical test. I believe show positions and duties are still a vital part of the educational process for any technical course of study, but that we cannot afford to keep forgoing the classroom style aspect of education. Just as true is the fact that the production needs aren't going anywhere either. The two do not have to be in contention and can, if handled properly, work in a very symbiotic manner. Care must be taken however, as Carl Weber points out, "Too heavy a load of theoretical lectures and papers and an excess of production work will cancel each other out." (Weber, 125) We have the luxury in our business, both professionally and academically, of knowing all our future projects for the next year and all of the time lines involved in said projects. Armed with this knowledge we need to look at the courses we are teaching concurrently and work to arrange them to complement each other. But I admit this is easier said than done.

One of the first hurdles is that due to the hectic nature of academic theater, deadlines tend to get pushed back. This leaves little time to adjust for a class's progress or to tailor a production schedule for anything other than just getting it done. We need to move deadlines forward and keep the calendar under control so that we can match our need to deliver a production with our obligation to educate. The typical undergraduate semester length is fifteen weeks long and, at

most shops I have been involved with, the necessary build time for a production is five weeks. That means that with even a high production department that does two shows a semester, there are five weeks of prep time available, or two and half per show assuming no planning overlap can be obtained. Now some of that is lost as the shows are not produced at the ends of semesters, but I'm making the assumption that the shows for the next semester were decided before the end of the prior one and that those weeks at the end can be used for preproduction work for the following semester. This is not counting the design process itself which tends to exist outside of this schedule until the design due date brings them together. If one can keep to this format of schedule, there exists some room to adjust and plan even before the build process begins without having to extend outside of the semester dates themselves. Even more so if one can adopt an overlapping schedule of crew heads to begin preplanning.

A calendar planned out in detail, further in advance can enable us to plan lessons to prepare students for some of the tasks they will be called upon to perform during their production duties. We can in essence become proactive rather than reactive. The normal course of the "learn by doing" method is to let the students figure it out as they go then intervene when things go wrong. If instead we were to focus upon *preparing* them for the tasks we know they are going to face in the next few weeks, we can instead use the time during the production sections to hone their skills and point out tips or tricks for a more efficient or professional application of their skills. We hardly have student directors and designers begin their course of study by producing a realized performance; why then is it often common to have student technicians and technical heads positions placed in this position? True they are often working their way up through the production ladder, but often their only classroom education came at the most basic level and the rest has been learning through observation. If instead there were educational

plateaus that they could hit along the way to both anchor and reinforce their skills in a classroom setting free from the make or break stresses of an realized production; it would provide a more consistent and balanced education which would in turn lead to more consistent production results. Plus, there is the added benefit that having the knowledge of how to proceed before beginning a task helps to promote confidence in the student body: both in itself and in their department.

One other topic that I want to touch on is the rapidly growing gap between professional and academic theatre when it comes to production values and technology. I mention this because it is becoming more of an issue as new technology is being introduced at a faster pace every year. I have heard from several crew heads in the professional market, most recently a show manager for Disney Cruises; that they cannot hire students straight out of school as they are not fluent in the newest systems that they would be using. There is no blame placed on the schools as they understand there is no way most programs can afford the latest equipment; but it remains a sticking point. From computer controlled routing systems and 3D printers, to moving lights and motor control systems, there is a whole new world of automated production that is being employed by a growing segment of the theatre and commercial community. We as educators need to help our students stay ahead of the curve while acknowledging that we are limited in our abilities and resources.

This is one of the pitfalls of the "learn by doing" approach, as our students are inherently constrained by our facilities. If instead we look to embrace our educational strengths we can use a classroom approach to teach the basic operational techniques of these new systems even if we do not have a full array of the latest technology ourselves. Many of these systems run on similar, if not the same, operational setups and can be emulated for practice and training. This way even

if a department cannot afford to fully equip itself, the students can be prepared for what will be expected of them when they graduate into the field.

Universities can help in this by facing the fact that many more of their programs are becoming reliant upon technology, not just the computer sciences. The practice of a system update of computer labs and campus computers every three to five years needs to be considered for the technical needs of many of the other programs on campus as well. I have worked with lighting systems that are 20 to 30 years old on campuses where the computer labs are filled with the latest Macs. Not only does this tend to lead to unsafe practices; it leaves the students graduating sufficiently behind the knowledge curve as to not be capable of holding leadership positions regardless of their skills or talents.

Until this happens, an option to consider might be returning to the practice of field trips. For schools at least somewhat adjacent to larger performance venues it may be practical to see if an arrangement can be made to look backstage at what is currently being used. To get to look at the draftings, renderings, and models of a planned production, see the performance, and then go backstage to see how it runs would be a valuable hands-on alternative. As a full scale show can take months to produce, the time spent doing this can be spread out over a semester and not take too much away from department schedules. I know many departments encourage their students to go and see shows in their spare time but seeing the entirety of the process would be a much richer experience and can provide great motivation and inspiration.

### **Chapter Three:**

#### Following Through and Keeping it Engaging

All of this may sound good in theory, but how does one actually attempt to make this happen? The hardest and most important part of this is to actually keep to the longer schedule I mentioned previously. By lengthening your preparation time during each semester, or even year, you gain the ability to work around conflicts and to maximize your available resources. One doesn't even need a particularly long production calendar length to accomplish this, merely the ability to plan out and adhere to a tighter schedule. Often times a production schedule will have an even distribution of time at the beginning; but a progression of delays and changes can build up through the year and end up compressing the build period to an unrealistic time period. So the first step is to stay on schedule, and realistically this is what we should be teaching anyway. I have seen professional shows threaten cancellation if deadlines are not kept, we should do no different.

There are two main facets to the advantages this can provide. The primary one is that you now gain some leeway to create two set of show crews, or at least two sets of crew chiefs, that can alternate show obligations. This way one crew can be involved in the current production and the other can be preparing for the one following. If a shows has time to prepare and is operating with a full build period; having a lead technician and perhaps an assistant step out of a production to prepare for the next will have much less effect on overall productivity. In addition, the faculty supervisors will ideally have the time now to look in on both groups and focus more

on their training than on trouble shooting and last minute fixes. This lessens the stresses on both the students involved and the physical shop itself. More time to prepare means a more efficient use of materials and space as well as time for the crews to recover mentally and physically between productions.

In addition, a second perk of more lead time is that faculty can begin to work course planning around upcoming productions. If the concepts involved in the shows for the next semester are already known one can schedule topics courses that are relevant to the show's needs. These courses can be arranged to give the students time to investigate and resolve real world based problems that they can then showcase on stage. The most effective way form of hands on learning is "by *designing experiences* through which students acquire new knowledge and develop new skills" (Teaching Learning Styles, RIT.edu) The idea of learn by doing has been coming under fire as being no better than free labor for the university; by structuring the form the jobs take, the emphasis shifts back to learning projects. This will also help to lessen the production load on the department as the work is now being spread out amongst a variety of courses over an entire semester instead of being an additional load upon those involved.

If we view the productions as a place to showcase our best work, we can shift the focus from "bigger is better" to higher quality. This will permit us to work with smaller, more focused, crews. With smaller crews working more efficiently on smaller, yet more refined, productions; the goal of having two separate crews working in tandem begins to appear as a viable option.

Each crew position job then has two parts to it. The first part would be to plan, schedule and prepare the upcoming production. This would include determining the timelines and deadlines for each phase of the project, making up any construction plans or draftings as needed,

figuring out all materials orders in advance, and solving any logistical or technical problems ahead of time. Then the effective midterm would be the transition to actual production. This includes resetting the shop and ordering all materials, giving design and process presentations to the crews to familiarize them with the order and process of production, and setting up work crews. The second half of the semester would be the actual build itself. Faculty and staff would then be free to keep on top of any changes, advise the build crews on processes, and adjust to any issues that come up. They would gain the ability to be proactive in terms of issues rather than just barely keeping on top of the basic build itself. Their freedom to now act more as direct supervisors and assist where needed will not only streamline the process but give the students valuable experience and practical training in crew management.

Both of these goals require a shift in mindset as to how a production fits within a department's curriculum. Productions need to be viewed akin to a final exam for a class; in fact, production head positions should be viable as topics courses and faculty members should have production supervision viewed as equivalent to a course they are teaching. This will help limit the overloading of students and faculty that has been endemic in causing burnout amongst both groups.

A final note on something that can tend to get lost in the crunch to complete course and show requirements in the limited time frame available and that is the need to keep the subjects engaging for the students. While it is not our job as educators to entertain or amuse our classes, we do need to be sure to show them why this is something they would like to do with the rest of their lives; or at least why they might want to explore more of the technical crafts. Since class and department size are becoming major issues in terms of funding, bringing in more students, and keeping them, is vital. We have introductory courses like Stagecraft or Introduction to

Performance (in their various guises at different schools) to help us with this as they are great draws for non-majors since they seem to be the least threatening of the core Arts requirements. As I will touch on later, these classes unfortunately tend to be survey courses at heart and thus some of the technical offerings become a fact grinding class and less enjoyable. I would like to see that change as it is our first impression upon many students.

If we take the aforementioned ideas and goals as being completed, it now becomes easier to switch the focus in the classroom back to exploring what we can do with these skills and about seeing what new solutions and innovations we can achieve. That is the real merit of the academic environment; freedom to do things that aren't already defined or decided. With that freedom we can introduce projects or tasks that have a more whimsical or challenging side to them while still introducing the students to the skills and topics that they will be using in the field. Ultimately we will be able to turn our attention toward getting the students to engage with the ideas behind the skills we're showing them instead of just getting the job done in time to open the show and start the next set of tasks. That route is what can make it seem like drudgery. In fact, many schools have the tradition of referring to the core class of Stagecraft as "Slavecraft"; thus almost ensuring that the incoming students are not invested, or engaged in what we are teaching them. I will assume the readers are familiar with the standard teaching practices encouraged in terms of engaging a class and inspiring students, and am going to focus on some things that we have uniquely at our disposal.

For one thing, our subjects never fall prey to the "But when am I ever going to need to know how to \_\_\_\_\_?" scenario; especially if we can schedule their time so that they can immediately go from learning a subject in lecture and then apply it in their practicum periods.

Once that connection is made it not only reinforces their knowledge of that subject but

encourages them to focus more on the rest as it is apparent that the things they are studying are not merely theoretical subjects.

In addition if we have scheduled our build with enough lead time, we can arrange it so that the same groups of students work on the same projects each day until it is complete. That sense of physical accomplishment is one that is less and less present in upcoming generations, and can be great for a student's self-esteem and morale regarding the class. I have seen this to be true from the youngest campers I teach, through the jaded high schoolers, and onto the undergraduate students that I am primarily speaking of now.

The third tool I have found to be surprisingly effective is that of group activities or projects. Mention them to most students and a collective groan will escape as traditionally these projects are plagued by inactive members that leave a few members overloaded to make up for it. Theatre is one area of study where this is far less common. Time doing production work in practicum periods gets the students used to working with their peers to accomplish a product and the combination of planning and physical production usually means there is a place for all members of the group to take part.

By its very nature, theatre is a unique subject in all its areas of study and if we use those aspects in our teaching we can reach the varied range of students that are drawn to the arts and engage them actively.

#### Chapter Four:

#### Conclusion

One of the main concepts that has come out of my work in this topic is now that high level technology is becoming standard in all levels of theatrical productions, we cannot continue to let technical production training be almost an afterthought of the production process. In order to be fair to our students we need to be providing them with not only a degree but with access to the skills that will permit them to survive and advance as artists and as craftspeople in their field. Proper training and education is the key to this; as is an honest realization and acceptance of our limitations and abilities.

If the changes I have suggested seem out of reach, perhaps the goals for the department have grown too high. While student labor has no monetary cost, there is a finite amount of it realistically available, as well a as a fixed number of students and faculty available at any given time. As the needs of production continue to grow, the length of the semesters do not and the students should not bear the weight of this imbalance. I spoke of the various needs of the department earlier, the needs of one aspect cannot outweigh the others to their detriment. We need to look to redressing the balance and perhaps realigning our focus in how we train our stage technicians. Stagehands are no longer limited to the traditional stage; in addition they work concerts, TV and film, sporting events, in fact almost all forms of performance media utilize the same core group of stage technicians. While the technology and techniques may have advanced;

the same principles of design, aesthetics of performance, and needs of production remain in essence the same. If we can direct our efforts towards training in these areas while keeping current with the technological advances we can give students a greater reason to attend a post-secondary school vs. just joining the rank and file.

#### Resources:

Included are sample Stagecraft and Basic Scenery Construction Syllabi as well as two sample lecture plans for specific sub topics covered in the Stagecraft class. Note the difference between the two syllabi in that the first is intended to cover a broad range of topics in a short period of time. The Stagecraft class is designed to orient new students to backstage practices and methodology, not function as their main training course as is often currently the case. Ideally however, the stagecraft lecture could be split into two courses with the organizational and historical components moved into more of a Production and Process course and leaving more time for exploration of topics and make it a true introduction to the various technical pursuits. This permits it to be more than just an acknowledgment of the career paths, but an explanation and introduction as to why one might want to pursue them in the future.

The second lesson plan, Scenic Carpentry, covers the same topics as mentioned in the Stagecraft class but now goes deeper into detail and allows time for practical application of the topics covered. Both course syllabi include group projects based on the premise that theatre is a group activity. Even one person shows are very rarely actually produced by only one person. Getting the students in the mindset that their, and their peers, success hinges upon everyone doing their part is better done sooner than later.

The Stagecraft lectures are designed to quickly go through the major bullet points of the topic in a fashion that is simplified and broken down to be readily familiar to a group with little to know practical technical knowledge. I have included handouts and drawings as I have

observed often times a student gets the an answer wrong because they were studying notes that were taken incorrectly; Blackboard and other online repositories for class information have also helped alleviate this issue greatly.

#### Theatre 106 – Stagecraft

(Based off of coursework designed with Alan Williamson at VCU)

Spring 2015

T-Th 11:00am - 12:30pm

Instructor: Christian Hershey

Office Location: Theatre Department

Office Hours: M-Th 2-6 by appointment

**Contact Information:** 

## **Required Texts:**

(G) Gillette, J. Michael, *Theatrical Design and Production* (7th ed).

(C) Carter, Paul, *Backstage Handbook* (3rd ed).

**Required Materials:** (labeled clearly with your name)

25' Tape Measure

Non-mechanical pencil

Safety Glasses

Architectural Scale Rule

## **Course Objectives:**

The purpose of this course is to introduce you to the basic concepts and practices involved in all aspects of production for a performance; from the initial design and planning, through construction, to the day to day running of a show. We will be covering stage and arena productions and venues both current and historical. In addition, you will be involved in the actual production of all main stage shows during the semester. Ideally you will leave with knowledge not solely of the technical specifics of the industry but a grasp of considerations and concepts that permit a production to proceed smoothly.

Specific goals also include:

An understanding of some of the basic tools and hardware used in the scene shop

Basic skills used in scenic construction and production

The ability to understand different drafting and rendering styles

Learning the proper language and terminology for discussing the technical aspects of a production and a theatrical venue.

### **Assignments and Grading:**

As with all classes: attendance is an important part of your grade, including active participation in all lectures and practical work sessions. There will be two exams, a few quizzes (based off of the readings and topics in lecture), two practical projects, as well as two papers in which you will discuss the technical aspects of two different performances you see during the semester. As this is a class based upon the production template; late work is not accepted. If you fall behind on a project be prepared to turn it in as it stands on the due date, to be graded in its current form.

#### **Grading Specifics:**

Participation - 10%

Quizzes (2) - 5% each

Practical Projects (2) -10% each

Exams (2) - 25% each

Technical review papers (2) - 5% each

#### **Attendance:**

As per the School guidelines: two absences from the lectures and 2 absences from the lab portion will be excused. Any absences beyond that will lower your letter grade by one per absence, they add up quickly, be careful and manage your time well.

# **Class Schedule:**

## **Assignment for class:**

T	Syllabus Review, Course Outline,	
	Origins of theater technology	
Th	Technical evolution in theater	G 37-51
T	Theatrical Venues: Then and Now	G 52-58, 71-75; C 257-261
Th	Arena vs. Stage settings:	
	Usages and differences.	
T	Hand Tools – Family, genus, and species	C 1-13, 30, 32-38, 40-41
Th	Hardware – Holding it all together	C 49-68, G 221-234
T	Materials: Lumber, Fabric, Steel and Plastic	C 119-149
Th	Understanding Draftings, Using a scale rule	G 115-137, C 270-275
T	Platforms, Flats, Stairs and Ramps	G 237-270,
		C 235-238, 276-279
Th	Moving Scenery: Wagons, Revolves, Lifts	C 268-269, G 271-283
T	Rigging and Soft goods	G 59-71, C 70-72, 99,
		C 264-267
Th	Basic Knots and Rigging Practical Lesson	C 87-94
T	Scenic Painting – Techniques and Methods	G 286-315 C 25-29
Th	Properties – Beg, Borrow, Annex.	G 316-344

T	TBA – Competition! If we're up to speed	Bring a helmet!	
Th	Midterm!	Study groups are a	
	-Bring your first review paper to class	good idea	
T	Costumes: Design to Build	G 450-460, 466-472	
Th	Fittings Etiquette and Show Conditions		
T	Lighting - Parts of a Unit, Hanging, Cabling	G 345-361	
Th	Lighting paperwork and Electrical Languages		
T	Lighting Practical - How to focus and troubleshoot		
Th	Video – From Slides to LED Walls		
T	Sound – The Forgotten Art	G 523-551	
Th	Putting all the pieces together – The path from concept to run		
T	Theatre's Organization	G 6-21	
Th	Theatre Organizations – Note the "s" makes all the difference		
T	Group Project – Part 1	Bring your second paper	
Th	Group Project – Part 2	Bring in finished project	
T	TBA		
Th	Review Date		
T	Final Exam!	Study A Lot.	

### **Theatre 206 – Scenic Carpentry**

Spring 2014

Lecture M-W 11:00am – 12:50pm

Instructor: Christian Hershey

Office Location: Theatre Department

Office Hours: M-Th 2-6 by appointment

Contact Information: 703-674-6929

hersheycj@vcu.edu

#### **Required Texts:**

(C) Carter, Paul, Backstage Handbook (3rd ed).

**Required Materials:** (labeled clearly with your name)

25' Tape Measure

Non-mechanical pencil

Safety Glasses

#### **Course Objectives:**

The intent of this course is to provide interested scenic technicians with a solid foundation in the methods, techniques, and practices used in common scenic construction. In addition, a basic understanding of the reasoning behind these methods and their origins will be discussed. Included will be instruction in how to read and understand build drawings and the other methods of documentation commonly used in the theatrical shop. Primary focus will be on construction of wooden elements and structures.

Specific goals include:

- -A working knowledge of all tools and hardware used in the scene shop
- -Comprehension of basic scenic construction and installation techniques
- -The ability to translate build drawings into three dimensional structures
- -Safe shop procedure and practices

32

### **Assignments and Grading:**

As with all classes: attendance is an important part of your grade, including active participation in all lectures and practical work sessions. There will be one exam, a few quizzes (based off of the readings and topics in lecture), two group projects, and one final project. As this is a class based upon the production template; late work is not accepted. If you fall behind on a project be prepared to turn it in as it stands on the due date, to be graded in its current form.

### **Grading Specifics:**

Participation -15%

Quizzes (2) - 5% each

Group Projects (2) -20% each

Exam - 15%

Final Project - 20%

#### **Attendance:**

As per the School guidelines: two absences from the lectures and 2 absences from the lab portion will be excused. Any absences beyond that will lower your letter grade by one per absence, they add up quickly, be careful and manage your time well.

Class Schedule:		Assignment:
M	Syllabus Review, Course Outline, Shop Orientation	
W	Tool qualification	
M	"It's all wood right?" Materials overview	C: 111-126
W	Hardware and Fasteners	
M	Advanced tool techniques	C: 127-130
W	Fastening methods	
M	Reading build draftings/making cut lists	
W	Build order, planning a project from the beginning	
M	Platforms – the literal foundation of it all	
W	Legs and Trusses	Prep Materials
M	Flats - Hollywood and Vine, I mean Broadway	C: 276-279
W	Construction variations and techniques	Prep materials
M	Hard cover vs. Soft cover flats	Have flat frame completed
W	Stage bracing and connections	C: 64-69
M	Group Project #1 – Cornered!	
W	Group Project #1 – Finish and present	
M	Stairs and Ladders	C: 22, 235-238
W	Rise and Run, Landings, Lay-out	Prep Materials

M Ramps, Rakes Compound Rakes, Painful math W M Drawing Shapes and finding forms C: 228-231 W Finding Area/Circumference/ Volume C: 218 -225 Accurate Deck Layout: 3,4,5's M W Exam! M Group Project #2 W Group Project #2 M TBA/Review W Competition!

M

Final Project!

Rest up

#### Scene Painting Lecture Plan

#### Paint – Parts

**Vehicle** – Water, Oil (turpentine)

- -Water: clean with soap and water, dries quickly, dilutes easily
- -Oil: Clean with turpentine, paint thinner, dries slowly, vibrant colors

**Pigment** – Ground minerals or chemicals to add color

- -Value position on grey scale
- -Hue position on color spectrum

Paint primary colors: Red, Blue, Yellow vs.

Light Primary: Red, Blue, Green

- -Dry Pigments same as standard pigment but mix yourself
  - -use animal glue binder typically
  - -white binder dries clear, constantly adjust color
  - -Aniline Dyes Super Vibrant, Water soluble, Carcinogenic

**Binder** –Oil, Latex, Acrylic

- -Oil: Old school, dries slowly, super durable finish
- -Latex: Traditional house paint, dries quickly, relatively durable, not as adhesive, cloudy finish
- -Acrylic: Modern art paint, same as latex but with a clear finish

Brush – **Handle** –the part you hold... Duh

**Ferule** - Metal band, connects bristles to handle

-Don't get paint in here!

**Bristles** – Natural vs. Synthetic

- -Natural: More absorbent, hold more paint, less durable
- -Synthetic: Less absorbent (heat treating improves this), more durable
- -Mostly synthetic now

Scenic Demonstrations – Things you can do with scenic paint

Base Techniques- Cross hatch – Not paint the fence

Avoids brush lines which can show up under stage lighting Fills in "holidays" or voids in paint surface

Gradient blend - Water and a color to blend

Can create "vignette" effect

Scumble – Evenly uneven blending of two or more colors

Maintains each color while creating areas of evenly mixed hue

Creates feeling of movement in base layer

Texture techniques – Multiples used on top of a base layer to create appearance of depth and recreate faux finishes

Sponge – Natural sponges vs. Synthetic

- Softer more organic feeling texture
- Lift and twist, don't spin

Rag roll - Evenly cover fabric

- Slightly harder edged texture
- Don't create "snail trails"

Spatter – Not "splatter"

- Goal is to create uniform texture across the piece
- Distance, force, and paint consistency will change effect

Spray – Creates fine even misting of color

- Start off and end off of piece
- Great for aging and vignetting

# Washes vs. Glazes – Water vs. Poly

- Layer for depth and separation
- Sealing finish

Combination Techniques - Combine many many previous techniques to create faux finish

# Woodgrain - technique over color

- Make texture read from a distance
- Audience wants to believe
- Spatter drag, cut brush, texture tool

### Marble – Unidirectional, not spider webs or lightning bolts

- Washes and glazes between layers, simulate eons of mineral transfer
- All the water
- Subtle color shifts

### Care and feeding of Brushes

-Hot water, gentle soap, make sure the water runs clear

What goes up, better stay up until the exact moment it needs to come down...

# **Or Stagecraft Rigging Lecture**

# Basic Rigging System:

Pirate ship drawing

Rigging comes from sailing ships

-yardarms, capstans, belaying pins and pin rails

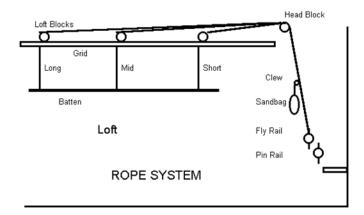
Whistling backstage folklore

Reduce to Mast=wall

Yardarm=batten

Pin rail=operating rail

Deck=deck

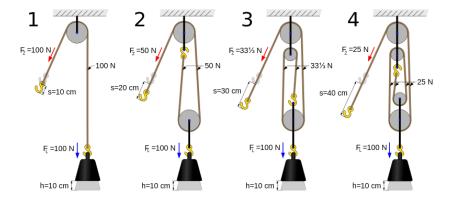


Parts: Fly loft (easiest way to recognize a theatre)

Pulleys also called blocks or sheaves, not shivs

Lines are what we call ropes

Explain advantages gained by pulley systems



Single Purchase vs. Double Purchase:

Single Purchase: Full height to deck, even load ratio, even travel ratio.

Double Purchase: Half height to deck, operator pulls half as far, moves twice the weight in the arbor as the load on the batten.

# Advantages of each:

Single purchase simpler, less house weight required.

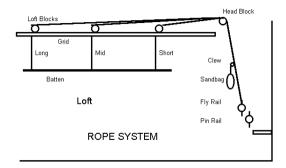
Double Purchase: more wing space, faster flying travel time

Explain that last part about 3 times... hard to grasp first time

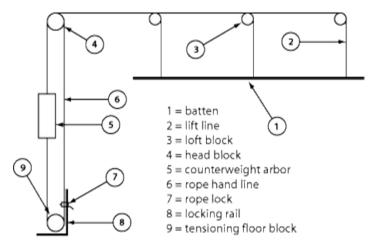
#### Weight systems used:

Hand winches – slow, usually loud, slow, usually have built in safety

<u>Sandbags</u> – used in a "hemp house", need to remain batten heavy "cause you can't push a rope" (Al Williamson) in an open system. Pain to operate. Need to use a clew to combine the ropes. Double purchase even worse, needs a hole in operating deck to allow bags to pass through.



### Arbor system:



Uses "pig irons" or stage weights in a closed system with an arbor.

Pig irons named for method of sand casting that looked like suckling pigs

Arbor loaded from a "load rail" above operating rail.

# Rigging safety:

Safe Working Load (S.W.L.) Maximum load divided by a certain amount to account for stresses.

5:1 for dead weight

10:1 for flying people

System can only support as much as it's weakest link. Every piece of hardware needs to be graded. (rated for load)

In an arbor system always fly batten in, load batten, load arbor, fly out batten, check weight balance. Keep the heaviest weight closest to the floor: in case of system failure there won't be a flyaway.

Safety calls vital:

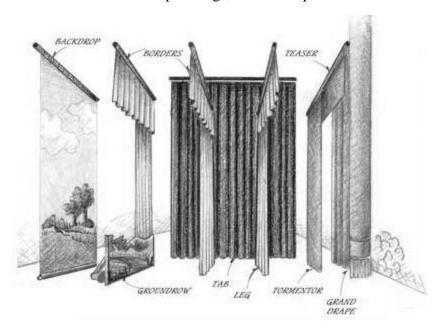
Call and response system. Resonse call equates to taking ownership of the process.

Never operate or work on any rigging system unless trained

# Soft Goods

Most commonly flown items.

From Grand Drape to legs, to backdrops.



Cyclorama or "Cyc" behind or in place of Backdrop

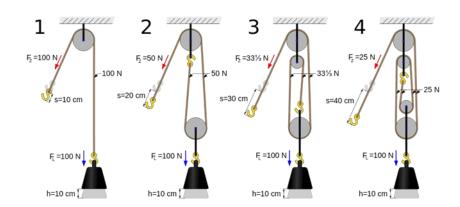
Webbing and grommets with tie-line at the top.

Typically weighted at the bottom with either chain or pipe depending on fullness.

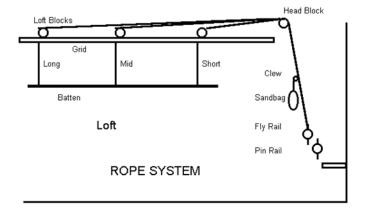
Fullness = ratio of depth of folds to distance travelled.

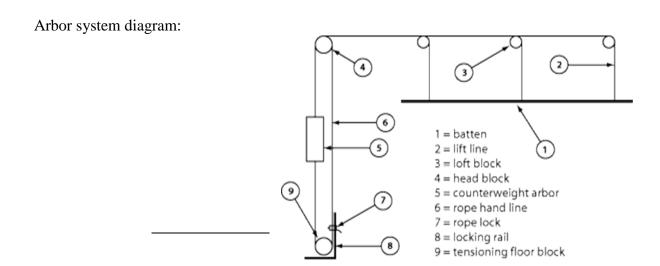
# **Rigging Lecture Handout**

Pulley systems with mechanical advantage explanation:



Hemp house system with sandbags:





### **Bibliography**

"Academics/ Areas of Study/ Drama." Bennington: Drama. Bennington College, 21 May 2015. Web. 20 June 2015.

Bay, Howard. "Teaching Design for Theatre". ed. Hobgood. Carbondale: Southern Illinois UP, 1988. 161-168. Print.

Barkley, Elizabeth F. *Student Engagement Techniques: A Handbook for College Faculty*. San Francisco: Jossey-Bass, 2010. Print.

"Best College Theater." The Princeton Review. TPR Education IP Holdings, LLC, 21 November 2014. Web. February 2014.

"Boyer College of Music and Dance." Boyer College of Music and Dance. Temple University, 5 Jan. 2015. Web. 20 June 2015.

"Dance, Drama & Film." Kenyon College. Kenyon College, 2 July 2014. Web. 20 June 2015.

"Department of Theatre." Department of Theatre. Northwestern University, 17 June 2014. Web. 20 June 2015.

"Department of Theatre, Drama, and Contemporary Dance." Department of Theatre, Drama, and Contemporary Dance. Indiana University, 22 May 2013. Web. 20 June 2015.

"Drama Department." Home. Vassar College, 20 Nov. 2012. Web. 20 June 2015.

East, Chip, ed. "What Is a Master's Degree Worth?" New York Times 30 June 2009: n. pag. Print.

Hendricks, Melissa. "Luring Prospective Faculty: How Can Basic Science Continue to Woo—and Keep—top Talent?" *Institute for Basic Biomedical Sciences*. Johns Hopkins Medicine, 2009. Web. 3 July 2015.

Hobgood, Burnet M. Master Teachers of Theatre Observations on Teaching Theatre by Nine American Masters. Carbondale: Southern Illinois UP, 1988. Print.

"Home." Theatre Speech Department RSS. Wagner College, 16 Jan. 2015. Web. 20 June 2015.

"Ithaca College." Theatre Arts. Ithaca College, 29 Apr. 2015. Web. 20 June 2015.

"Local 22 IATSE Training." IATSE Local 22. IATSE Local 22, 9 July 2015. Web. 6 Aug. 2015.

Marchese, Thomas. "The New Conversations About Learning: Insights From Neuroscience and Anthropology, Cognitive Science and Workplace Studies." *New Horizons for Learning*. Johns Hopkins University, 1 Apr. 2015. Web. 2 July 2015.

"Purchase College - Academic Programs - Arts - Theatre Arts." Purchase College - Academic Programs - Arts - Theatre Arts. Purchase College State University of New York, 23 May 2013. Web. 20 June 2015.

"School of Drama." School of Drama. Carnegie Mellon University, 16 Sept. 2010. Web. 20 June 2015.

"Some Characteristics of Learners, With Teaching Implications" *Teaching Learning Styles*. Rochester Institute of Technology, 18 June 2015. Web. 9 Oct. 2014.

"Undergraduate Programs | Emerson College." Emerson College. Emerson College, 20 Aug. 2014. Web. 20 June 2015.

Weber, Carl. "The Craft of the Eclectic". Hobgood 121-158

"Welcome from the Chair." Elon University. Elon University, 19 May 2015. Web. 20 June 2015.

"Where Art Meets Opportunity." School of Performing Arts » Stephens College. Stephens College, 14 June 2012. Web. 20 June 2015.

"Yale College Programs of Study." Theater Studies. Yale University, 1 July 2015. Web. 20 June 2015.

Christian Hershey was born on April 28, 1975 in Philadelphia, Pennsylvania. After completing his course of study at The Hill School in Pottstown, Pennsylvania, he entered St. Mary's College of Maryland, St. Mary's City Maryland, in 1993. He received his Bachelor of the Arts from St. Mary's in May 1998. Following that he was employed at multiple professional and academic theatre venues including George Mason University and the Washington Shakespeare Company as well as working as a stagehand for I.A.T.S.E. Local 22. He was most recently a visiting assistant professor at Sweet Briar College and is currently filling the same role for Randolph College while completing his studies in the Graduate Program at Virginia Commonwealth University in Richmond Virginia.