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Significant learning principles as reedmaking pedagogy

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BOSTON UNIVERSITY
COLLEGE OF FINE ARTS

Dissertation

**SIGNIFICANT LEARNING PRINCIPLES
AS REEDMAKING PEDAGOGY**

by

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Now in the whole process of development, that we as teachers would assist in the development of a person, I find that one of the real difficulties with the instrument is that it is getting in the way . . . The goal with the instrument is to come as close to absorbing the instrument completely within oneself as possible . . . to envelop it.

Learn to hear yourself and learn to hear the music, and it will guide you, and if you do that, and your students do that, there is always the possibility of improvement and development, forever, for as long as you work.

- *John Mack, Effective Guidance for the Young Oboist*

DEDICATION

To all students of reedmaking, and those oboists everywhere who seek the perfect reed.

May the journey be as valuable as the result.

ACKNOWLEDGMENTS

I would like to thank Susan Conkling for guiding me to the genesis of this project in her *Teaching College Music* seminars, and for her unfailing support throughout all of my doctoral work. Thank you to also Dr. Andrew Goodrich for his support and advice.

This project is a reflection of the love and support of my parents, Lon and Barbara, and my sister Leslie. It certainly would not be possible without hours of emotional and technical support provided by my wonderful partner, Sam, who has spent more hours observing me at the reed desk than any of my fellow oboists.

And most of all, thank you to my oboe teachers — John Ferrillo, Linda Strommen, and Robert Sorton. Without your expertise, patience, and masterful teaching, this project (and all of the reeds in my reed box) would never have come to fruition. Any skill and passion I have developed for teaching reedmaking is a product of your brilliance.

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ABSTRACT

Reedmaking is as integral to oboists' skills as performers and teachers as any other element of their musical study. Reeds regulate almost all aspects of oboists' music making, including pitch, line, and tone. But reedmaking is also the part of oboists' professional training least integrated with their overall music education. Currently available resources on oboe reedmaking are written for the practitioner, and tend to be technical rather than pedagogical in nature. They do not cater to oboists' varying backgrounds in reedmaking; nor do they take into account a given student's unique physiology, technique, or variations in the instruments themselves. Indeed, techniques for teaching reedmaking have barely changed since the oral tradition of the nineteenth century. Given these shortcomings, there is great opportunity for instructional reexamination and intervention in the teaching of reedmaking.

This dissertation blends reedmaking's pedagogical traditions with principles from L. Dee Fink's theory of "significant learning" into a useful, task-based guide for oboe professors in modern collegiate settings. First, it surveys historical writings on reedmaking and reedmaking pedagogy from the invention of the oboe to present day. It then examines relevant data and narratives about typical modern reedmaking pedagogy in the context of higher education. Third, it envisions reedmaking curricula based on

significant learning principles. Finally, it explores broader implications for the oboe studio, other performance studios, and the expansion of a literature of reedmaking pedagogy.

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CHAPTER ONE: INTRODUCTION

Reeds regulate almost all aspects of oboists' music making, including pitch, line, and tone. Garnier's *Méthode raisonnée pour le haut-bois*, one of the earliest pedagogical materials for the oboe, describes the special relationship of the reed to oboe playing: "The reed, properly speaking, is the heart of the oboe."¹ Consequently, reedmaking is as integral to oboists' knowledge and skill any other element of musical study.

However, reedmaking has been positioned as notoriously difficult to master and frustrating even to the best among us. In his *Method*, which is still the most commonly used etude book for oboists, A. M. R. Barret writes, "It will sometimes happen, notwithstanding the greatest care and attention, that the reeds turns out badly: this may arise not from any fault in the making, but be attributable to the quality of the cane."² Most oboists will recall their teachers spending hours at the reed desk, bemoaning bad cane, changes in temperature, or a poorly adjusted gouging machine. Indeed, even the beloved master of the American school of oboe playing, Marcel Tabuteau, complained so much of his frustration with the oboe and its reeds that he advised students not to pick it up, and with dark humor quipped, "I have been playing the oboe for 45 years, and for 44 years my greatest desire has been to give up that very ungrateful instrument."³

Although reedmaking is essential, it remains the least integrated part of oboists' professional education. Various factors make reedmaking inefficient for teacher and

¹ François Joseph Garnier, *Méthode raisonnée pour de haut-bois* (Paris: Pleyel, ca. 1800), 5.

² Apollon Marie-Rose Barret, *A Complete Method for the Oboe* (London: Jullien & Co., 1862; Reprint, USA: Boosey and Hawkes, nd.), 11.

³ Laila Storch, *Marcel Tabuteau: How Do You Expect to Play the Oboe if You Can't Peel a Mushroom?* (Bloomington: Indiana University Press, 2008), 239–40.

student alike:

Time. Reedmaking typically is taught in the context of weekly lessons, which are often too short to include work on playing techniques, repertoire, and the complex skills of reedmaking. A teacher must choose between addressing performance or addressing the quality of a reed during each minute of the lesson. Reedmaking may also be taught within the masterclass setting, but it is rarely offered for credit as a standalone course. Using teaching time effectively in any instructional setting is affected by the inherent intertwinedness of reeds and other aspects of playing. Technique and repertoire often receive the bulk of teachers' attention, but oboists' reeds and the way they are made significantly influence other aspects of technique, therefore influencing the repertoire that may be performed. While the quality of a reed is a means to a musical end, the quality of musicianship depends on the quality of the reeds.

Need for individuation. Reeds must be made to each player's individual instrument and physiology. Existing texts on reedmaking necessarily describe either generalized approaches or do not qualify reedmaking practices with individual disclaimers. Because basic texts are written in a general way, and similarly when reedmaking is taught in a group setting, the student's unique tendencies, learning style, and stage in the learning process can be overlooked.

Pedagogical tradition. Because techniques for teaching reedmaking have barely changed since the oral tradition of the nineteenth century, it is hardly surprising that there is a degree of inefficiency in the way we teach reedmaking today's institutional teaching environments. This is not an attempt to discount traditional teaching techniques for

reedmaking; in fact, many of the methods that have been used to teach reedmaking in the past are complementary to scholarly models for best teaching practices that are followed today, such as active learning, team-based learning, and problem-based learning.

In *College Music Symposium* in 2003, Susan Wharton Conkling wrote:

There is a growing critical discourse about teaching and learning, both within and across disciplines in higher education. In part a response to public calls for accountability in higher education, the discussion is putting to rest the notion that good teaching is based solely on scholarly insight in one's field. It foregrounds the possibility that all teaching can be documented and investigated, and that even the best teaching can be improved.⁴

This project is intended to fill a void in the currently available resources on oboe reedmaking. Almost all current literature is written for the practitioner, and tends to be technical rather than pedagogical in nature. These materials typically describe reedmaking tools, time management, and general principles of how the reed should function. Guidance for teachers tends to be vague, limited to suggestions for when students should begin making reeds, or when students should reach reedmaking independence from their teachers. To this point, little discussion has arisen about individual students within an oboe studio, and how reedmaking might interact with their learning styles or career goals.

The primary framework for inquiry will be L. Dee Fink's theory of Significant Learning.⁵ The aim of Significant Learning is to shift from a content-centered paradigm to a learning-centered paradigm. If the learning is significant, the student will be

⁴ Susan Wharton Conkling, "Envisioning a Scholarship of Teaching and Learning for the Music Discipline," *College Music Symposium* 43 (2003): 55.

⁵ L. Dee Fink, *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*, 2nd ed. (San Francisco: Jossey-Bass, 2013).

permanently changed by the learning process. Fink is an expert on instruction and integrated course design, and his writings are based on the most current research about college students' psychological and social development. His theory is not discipline-specific, and he encourages its use in courses and individual tutoring throughout higher education. In fact, Fink acknowledges that one of the most important influences on his thinking was a music professor colleague. Fink is adamant that faculty should not continue to blindly teach as we were taught, and he argues that course design is the best mode of intervention to ensure that students learn in a significant way. Fink's theory of Significant Learning can help shed new light on pedagogical traditions, like reedmaking, that have remained unexamined, and therefore uncontested.

Fink's curriculum design process is based on six Significant Learning Areas: Foundational Knowledge, Application, Integration, Human Dimension, Caring, and Learning How to Learn. Courses developed in Fink's method are "integrated" in that they ask teachers to develop learning goals in each of these six areas, and then ingrain these goals into each element of the course design itself, including content, course activities, and feedback.⁶

In this project, the Foundational Knowledge of reedmaking is enriched by the other five categories through both traditional and new learning constructs. In doing so, the basics of reedmaking become a nexus for the student's meaningful discovery of how

⁶ Bruce C. Kelley, "Design for Change: Creating Significant Learning Experiences in the Music Classroom," *College Music Symposium* 46 (2006): 74. There is limited scholarship on application of Fink's theories to music courses. Bruce C. Kelley describes successful application of Fink's theories to his music theory "Forms and Analysis" course, but expresses doubt about their usefulness in applied lessons.

they interact with the world, as an oboist, musician, and person. The focus of the student is not solely on the (often stressful) physical crafting of the reed, but instead encompasses the use of the reed in artistic oboe playing, and the role of oboe artistry in society.

Conkling also imagined what a scholarship of teaching and learning might look like for music:

Scholarship of teaching and learning, especially while it is at an early stage of development in the music discipline, will probably resemble stories. These stories will give rich descriptions of the present, and build theories that ought to help us anticipate the future of teaching and learning in higher education.⁷

Based on Fink's writings on Significant Learning and related scholarship, I argue for a new paradigm in reedmaking. This work is accomplished by blending reedmaking tradition, these rich descriptions of past and present teaching, with Significant Learning principles into a useful, task-based guide for oboe professors in modern collegiate settings. To lay the groundwork for this discussion, a survey of historical writings on reedmaking and reedmaking pedagogy from the invention of the oboe to present day is presented, including modern reedmaking pedagogy as it is typically executed in higher education today. I will synthesize two modes of inquiry — “stories” of reedmaking pedagogy in its present state and current higher education theory, as represented by Fink — into a set of recommendations for oboe professors for use in teaching reedmaking in their studios. In doing so, I offer a first attempt at “building theories” of reedmaking pedagogy — a vision of how we might blend the oral tradition of reedmaking with curricular design to serve twenty-first century students.

⁷ Conkling, “Envisioning a Scholarship,” 64.

CHAPTER TWO: A HISTORY OF REEDMAKING PEDAGOGY

Early History

The earliest recognizable predecessor of the modern oboe, the hautboy, became distinct from the shawm in the first half of the seventeenth century. It was developed to better match the timbre of strings in French court orchestras, rather than the brass of outdoor ensembles. The instrument afforded the ability to play in more keys and with better dynamic control than the shawm. It was made of lighter woods (typically boxwood), the bore was elongated, and the tone holes were smaller than the shawm. This created more resistance in the instrument itself for the desired tone and dynamic effects of seventeenth and eighteenth century repertoire. The reeds of the hautboy were thinner and wider than those of later oboes to accommodate the resistance created by the narrowness of the instrument and its small tone holes. No reeds from earlier than 1770 have survived, but we are able to reconstruct an understanding of them from art works and descriptions of the time. The hautboy used a metal staple to connect the reed to the bore of the instrument, as the modern oboe does, and it was common for performers to purchase reeds from instrument makers, rather than making the reeds themselves.⁸

As the new instrument continued to develop in its construction, its reeds changed accordingly. Then, as now, reeds were made for different musical styles and tone concepts according to geographic region. Even then, there was no consensus on a single right way to make a reed, but rather a sense that the reed must suit a given instrument and

⁸ Janet K. Page, et al., "Oboe," Grove Music Online, Oxford Music Online, Oxford University Press, accessed April 5, 2017, <http://www.oxfordmusiconline.com.ezproxy.bu.edu/subscriber/article/grove/music/4045>

the musical task at hand.⁹

The Diderot *Encyclopedia*, published 1751–65, is an early example of objective writing about the reed, providing observational documentation of the reed’s construction, including materials used and general function of the vibrations of the reed.¹⁰ English tutors throughout the seventeenth and eighteenth centuries describe the qualities of good reeds and provide some advice on their use. The earliest known oboe tutor, by John Bannister, remarks about the oboe, “with a good reed, it goes as easy and as soft as the flute.”¹¹ A tutor from Longman and Broderip, circa 1780, remarks, “Before you put the Reed in your Hoboy you should spit thro’ it, or wet it, as it will be easier and better tone than when dry, and when you chuse a Reed you must blow thro’ it without pressing your lips, and if it crows free, you are certain ‘tis a good one.”¹² The earliest description of the reedmaking process comes from the *Méthode* by François Joseph Garnier, who became first oboe with the Paris Opéra in 1778. This tutor, published around 1800, is one of the longest for the two-keyed oboe, and includes description of the tools needed to make reeds as well as techniques by which to test the function of finished reeds.¹³

Tutors and methods from the nineteenth century reflect a combination of encyclopedic and pedagogical approaches. These works typically include description of

⁹ Geoffrey Burgess and Bruce Haynes, *The Oboe* (New Haven: Yale University Press, 2004), 48.

¹⁰ Denis Diderot and Jean Le Rond d’Alembert, *Encyclopédie ou Dictionnaire raisonné des sciences, des arts et des métiers, par une société de gens de lettres*, 17 vols (Paris: Briasson, 1751–65).

¹¹ John Bannister, *The Spritely Companion* (London: Printed by J. Heptinstall, for Henry Playford, 1695), no. 20, 47.

¹² *New and Complete Instructions for the Oboe or Hoboy* (London: Longman and Broderip, ca. 1780), 5–6.

¹³ Garnier, *Méthode raisonnée pour de haut-bois*.

the instrument, reeds, reedmaking tools and processes, as well as basics of musicianship with progressive studies. Henri Brod's *Méthode pour le Hautbois* (ca. 1830) is the most complete description of making of reeds before 1850, and documents in detail the method of reedmaking before the use of later-developed equipment like gouging machines and shapers.¹⁴ Brod remarks, "the making of reeds is not a great difficulty when one is provided with good tools and good cane. It is a work which calls for patience and meticulous care; with these two qualities one is sure to attain satisfactory results after a short time."¹⁵ Brod describes the reedmaking process from cane selection through finishing for tone and function. Although Brod died before he was able to become professor at the Paris Conservatoire, his invention of the cane shaper and gouging machine were integral to the modernization of reedmaking.¹⁶

The still-beloved *Method* by Apollon Rose Marie Barret (1848) includes an illustration of reedmaking tools, including the newly invented gouging machine, as well as a short essay on how to make reeds. Barret explains the importance of the reed:

It is of paramount importance that performers should be able to make their own reeds. As they must be formed to suit the lips and teeth, none can judge so well as the player the description of reed he requires for a reed adapted for one performer will be totally unfit for another. There are three things necessary to constitute a good reed, justness [pitch], certainty [response], and quality of tone, but it is almost impossible to have all of these requisites combined.¹⁷

By the 1840s, regional differences emerged in tone concept: a spritely French color with

¹⁴ Peter Hedrick, "Henri Brod on the Making of Oboe Reed," *International Double Reed Society Journal* 6 (1978), 7.

¹⁵ Ibid.

¹⁶ Burgess and Haynes, *The Oboe*, 134–5.

¹⁷ Barret, *Method*, 10–11.

narrower reeds, and a darker German color with wider, heavier reeds.¹⁸ These national inclinations are still present today, and inform many aspects of reedmaking technique.

Georges Gillet, professor of oboe at the Paris Conservatoire from 1882 to 1919, appears to not have believed in teaching reedmaking to students at all. “He insisted that his students play on the reeds that he made for them” — a requirement that his nephew and student Fernand Gillet believed “was a mistake.” Georges made sure his students had his reeds:

which were sold at the Lorée shop. He made reeds very rapidly. Fernand said he had seen him make twelve reeds in an hour. “Oh yes, my uncle made them for his pupils. ‘I don't want them to have a bad tone,’ he said. But that didn't help —when they had to go on by themselves, they were in trouble.” . . . Obviously the Gillet pupils were on their own with little or no help from him on reeds, and were completely dependent on his reeds during their student years.¹⁹

After leaving the Conservatoire, students were left to “sink or swim” with their reedmaking.

Marcel Tabuteau, principal oboe of the Philadelphia Orchestra from 1915 to 1954, is generally credited with the invention of the “American scrape” oboe reed, which remains the predominant style of reed used by American oboists. It appears, however, that this scrape, which altered the “short scrape” French-style reed, was being used by various other performers in the United States before Tabuteau began to experiment with it.²⁰ Nevertheless, Tabuteau’s success as both a performer and as a teacher at the Curtis Institute popularized the scrape in America and is the major contributing influence to the

¹⁸ Page, et al., “Oboe.”

¹⁹ Laila Storch, “Georges Gillet: Master Performer and Teacher,” *Journal of the International Double Reed Society* 5 (1977).

²⁰ Storch, *How Do You Expect to Play the Oboe*, 204.

American conception of sound production and musical style on the oboe. Although he is well known for his contribution to reedmaking in America, Tabuteau, a student of Gillet, did not produce an oboe method or writings on reeds. It is possible, however, to glimpse his practices through his students' memories and photographs of his reeds. A few themes are clear. For one, his well-documented views on musical phrasing influenced his philosophy on reedmaking and its pedagogy.²¹ And while he clearly prioritized musical expression over the minutiae of technique or reedmaking — spending minimal time on reedmaking with his students compared to many modern teachers — his own constant search for the perfect reed, even in retirement, speaks to the value the reed has in achieving one's musical ideals.²² Laila Storch recalled that Tabuteau gave her a reed for an important Curtis Orchestra radio broadcast.²³ In addition, he was known for handing out reed “carcasses” — reeds cut from the tube with some thread remaining so the student could re-tie them for their own use.²⁴ Tabuteau would occasionally scrape on students' reeds,²⁵ but more commonly gave them advice when they strayed from his ideal rather than dictating specific instructions.²⁶ On the other hand, Tabuteau would occasionally smash students' reeds as a sort of punitive pedagogical tool.²⁷

In the twentieth century, writing on reedmaking and its pedagogy extended to reedmaking manuals and academic journal articles for oboists and educators.

²¹ See David McGill, *Sound in Motion* (Bloomington: Indiana University Press, 2007); and Storch, *How Do You Expect to Play the Oboe*.

²² Laila Storch, “Marcel Tabuteau,” *To the World's Oboists* 2, no. 1 (1974).

²³ Storch, *How Do You Expect to Play the Oboe*, 310.

²⁴ *Ibid*, 497.

²⁵ *Ibid*, 236.

²⁶ *Ibid*, 313.

²⁷ *Ibid*, 271.

Reedmaking manuals published in America before 1960 tended to be short, often combining oboe and bassoon reedmaking. These guides often were intended for those oboists who could not study regularly with a good teacher, which was more common in the early part of the twentieth century before regional orchestras were founded. The guides also acknowledged the importance of making reedmaking accessible to music teachers, band directors, and those that played multiple instruments. A majority of these manuals published before 1960 demonstrate short-scrape reeds, rendering them outdated by current American standards. Articles in journals for educators, including *The Instrumentalist* and *The School Musician*, offered advice to public-school band directors on how to deal with the challenges of reeds and reedmaking for school-aged students, including sources through which to purchase reeds, information on how to prepare students for performance success, and descriptions of the nature of the reeds themselves (such as their sensitivity to weather and altitude changes). *To The World's Oboists*, the predecessor of *The Double Reed*, the journal of the International Double Reed Society, was published beginning in 1972, and included many articles on reeds and reedmaking, many of which offered similar advice or reported scientific research on reedmaking materials.

Modern Reedmaking Books

Since 1960, American oboists have produced a variety of reedmaking books. The majority of these are technical guides. Both *The Art of Oboe Playing* (1961) by Robert

Sprenkle and David Ledet²⁸ and *Oboe: Art and Method* (2009) by Martin Schuring present information about oboe performance technique and reedmaking within a single volume. Peter Hedrick's *Oboe Reedmaking: A Modern Method* (1972) is a brief treatise on how to make a reed, with an appendix about sharpening knives. Jay Light's *The Oboe Reed Book* (1983) is a manual on how to make reeds from beginning to end, and reflects Light's training with John de Lancie. Melvin Berman's *The Art of Oboe Reedmaking* (1988) provides a guide for oboists in the same spirit of Light's manual, but is less known. David Weber and Ferald Capps' *The Reedmaker's Manual* (1990) is a clear and concise manual for oboe and English horn reeds. Ann Rosandich's *The Encyclopedia of Oboe Reedmaking* (2011) is a detailed and comprehensive reedmaking book that draws on educational tools typical of other fields' textbooks. Finally, Linda Strommen and Elaine Douvas have developed teaching materials that describe how to make and evaluate reeds, influenced greatly by the practices of their teacher, John Mack. These materials, which are divided into two classes as taught at the Interlochen Oboe Institutes, are unpublished, yet they are in wide circulation among their students. There are undoubtedly similar unpublished resources that have been developed by other oboe teachers.

Over these almost sixty years, writers enriched their reedmaking guides with visual innovations. Hedrick's photographs of backlit reeds his book are the first of their kind. Because oboists continuously examine their own scraping with backlighting, this photographic development is pedagogically valuable and close to authentic practice.

²⁸ The portion about reedmaking was penned by Ledet, who later wrote *Oboe Reed Styles* (1981). Ledet provided a detailed explanation of the construction of the reed, one too detailed for beginning students, and he described a short-scrape that is no longer relevant in American playing.

Ledet wrote *Oboe Reed Styles* as a comprehensive collection and cross-cultural comparison of reeds and reedmaking. He highlighted unique aspects of various nations' reedmaking and performance styles through similar backlit photographs and detailed measurements of the reeds. Weber and Capps' *Manual* includes large, high-resolution photographs of reeds of John Mack, John de Lancie, and James Caldwell. Berman produced a video about oboe reedmaking to accompany his book, but it is not in wide circulation and was unavailable for this study. Writers have also experimented with styles of content delivery. Weber's *Manual* is the style of a workbook, rather than in prose, as most reedmaking manuals are. Rosandich's *Encyclopedia* uses textbook-style elements, including using chapter outlines and summaries, and color-coding information that is related across topics or chapters. The book is also published in two editions, for right-handed and left-handed reedmakers.

These books contain multiple examples of recommendations that speak to Significant Learning principles. Ledet, in *The Art of Oboe Playing* described the problem solving involved in evaluating and adjusting a reed:

The five main qualities of a reed are so closely interrelated that it is almost impossible to adjust one of them without affecting one or more of the others . . . For example, if the *opening* is changed, the resistance, response, pitch, dynamic range, and playing quality can be affected. If the *resistance* is changed, the response, quality, and dynamic range can be affected. If the *pitch level* is changed, so, too, is the pitch of the oboe within itself. Sometimes the quality, response, and dynamic range are also affected. Therefore, the process of reed adjustment is a compensation for strong or weak points by balancing the five characteristics to the point where they complement each other.²⁹

²⁹ Robert Sprenkle and David Ledet, *The Art of Oboe Playing* (Evanston, Ill.: Summy-Birchard, 1961), 96.

Jay Light's second book, *Essays for Oboists* (1994), while not exclusively about reedmaking, includes some information that is in the spirit of Significant Learning, including an in-depth walkthrough on how to problem solve when preparing a Barret etude, advice on how to improve playing skills over time ("like chipping away at a statue"), and musings on what it means to be an artist. Berman's book includes a few passages that illustrate how he inspires caring about reeds and learning patience (Human Dimension).

Caring: "Experimentation is highly recommended. The gouge of the cane is a controversial and much discussed subject among oboists, as is the shape and the material from which the staples should be made. The specific material is of very little importance as long as it is airtight. These variations make the playing of the oboe one of the most interesting and fascinating of all the woodwind instruments and perhaps the most interesting and fascinating of any of the instruments of the orchestra."³⁰

Human Dimension: "There is no magic involved in successful reed making. What is required are good tools, good light, the best cane available, an optimistic approach and much patience."³¹

Martin Schuring has made some of his reedmaking materials publicly available through his Arizona State University Oboe Studio website, in which he speaks to the process of Learning How to Learn:

Observe everything. Successful reedmaking is nothing more than an accumulation of experience and the elimination of error. This includes not only obvious errors like tearing off bits of tip and tying past the end of the tube, but also cane selection, careful gouging, shaping, tying-on, scraping, etc. Learn which types of cane work best for you. Which shapes, which tubes, which knives, etc. If you find something that works, stick to it. Most of all, think while you make reeds. Observe everything. *You may ruin the reed you're working on, but make sure you*

³⁰ Melvin Berman, *The Art of Oboe Reed Making* (Toronto: Canadian Scholar's Press, 1988), 6.

³¹ *Ibid*, 54.

*learn something from the experience.*³²

Rosandich's *Encyclopedia* is certainly learner-centric in a variety of ways, but falls short of speaking directly to teachers about reedmaking pedagogy itself.

This literature review of reedmaking resources demonstrates that there is not an urgent need for more volumes about how to make the reed and adjust its function. And while the specifics of reedmaking in each guide differ, the fundamentals of a good reed remain the same as they have since the invention of the instrument — in tune, responsive, with a healthy amount of resistance, and with a pleasant tone for each individual player and their instrument. Although they are fewer in number, reedmaking manuals have also been written that include guiding philosophies of reedmaking and its relationship with musicianship.

What is lacking, therefore, is not a literature of reedmaking generally, but rather a literature of reedmaking pedagogy. There are no extant sources that speak directly to teachers about the best teaching strategies for reedmaking, to various types of learners at different stages of the learning process, or to the concerns of the oboe teacher in various institutional settings. And because oboists generally agree about the qualities of a good reed notwithstanding the differences between their approaches, there is a sound basis for establishing a pedagogy poised to best achieve those qualities.

³² Martin Schuring, "Reed Adjustment Guide," Arizona State University Oboe Studio Website, last updated August 2012, accessed March 15, 2017, <http://www.public.asu.edu/~schuring/Oboe/Reedguide.html>.

Current Practices: Institutional Factors

Understanding today's students and the modern institutions in which oboists teach is crucial to any discussion of reedmaking pedagogy and suggestions for its improvement. This chapter defines these common Situational Factors, in Fink's parlance, as well as providing an overview of other documented reedmaking teaching strategies beyond the previously discussed published materials.

Two surveys of reedmaking and its pedagogy have been conducted that give some statistical and observational insights into the practices of oboe teachers and the institutions in which they teach. The first, produced by James Prodan, was published in 1979. While much of the professional landscape for oboists and oboe teachers has changed since then, it nonetheless provides one-of-a-kind information on the pedagogy of the oboe and its reeds. He collected basic demographic information about respondents: Two-thirds of the respondents taught oboe at the undergraduate level, most commonly with a studio of four to six students. Over half of the respondents had studied with Robert Sprenkle, John Mack, or Robert Bloom. One hundred percent of respondents made their own reeds.³³

Although Prodan did not include survey questions regarding the specifics of reedmaking pedagogy (e.g. "When should a student start making reeds?"), 72 out of 73 respondents indicated that the most problematic aspects of playing for student oboists were control and reeds, and 51 out of 71 respondents indicated that reeds were the biggest challenge for professional oboists. Half of the respondents indicated that they used a text

³³ James E. Prodan, *Oboe Performance Practices and Teaching in the United States and Canada* (Akron: Ohio, Institute for Woodwind Research, 1979), 42.

for teaching reedmaking, most commonly the Sprenkle-Ledet book, and 21 out of 39 respondents indicated that they had developed their own pedagogical materials for reedmaking or other pedagogical problems.³⁴

The second survey, specifically on the pedagogy of reedmaking, was conducted by Elizabeth Ann Rennick (2010). The population for this survey included 115 oboe instructors who were either full-time instructors at four-year degree institutions, or employed full or part time at institutions with graduate programs; 59 percent of respondents were full-time professors and 41 percent of respondents were part-time, including Adjunct or Lecturer appointments.³⁵ The questionnaire included categorical responses, but it also allowed for open-ended responses; thus, it captured individual accounts of pedagogical practices. Rennick states, “There are many factors specific to the teaching institutions themselves that affect the type of education received by young reed makers. These factors include everything from hiring policies to curriculum requirements.”³⁶ Fifty-six percent of respondents had a reed room for student use; institutions with full-time professors were much more likely to have a reed room.³⁷ Contextual information about the reed room was solicited as well; some respondents indicated waiting on grant approval, using their own office as a reed room, or a total lack of space at the institution. Sixty-eight percent indicated that they had a dedicated weekly reedmaking class or reedmaking time with the teacher, but of these, only 32 percent

³⁴ Ibid, 76–81.

³⁵ Elizabeth Ann Young Rennick, “Oboe Reed-making Pedagogy in the United States: A Survey,” (DMA diss., University of Iowa, 2010), 57.

³⁶ Ibid, 5.

³⁷ Ibid.

offered course credit for reedmaking apart from lesson or masterclass credit.

Nevertheless, 77 percent of teachers taught reedmaking in lessons in some form.³⁸ The specifics of how reedmaking instruction was conducted vary in almost every response.

For example:

This was part of the lesson grade that equaled 25% of the grade; however next year I am making it a separate class for one hour.

Twice weekly reedmaking classes as well as one-on-one time with the instructor.

Whenever we have time.

One hour per week, oboe studio reed making class AND approx. 15 minutes of individual reed making instruction at nearly every private lesson.³⁹

Responses indicated that many oboe teachers hold a reedmaking class or individualized instruction outside of both lessons and masterclass.

Rennick asks if teachers allow students to purchase reeds and receives a similar variety of responses:

NEVER.

I don't forbid doing so, but they do not.

Yes only if they have another academic area.

Frosh/Soph use my reeds; Jun/Sen must make own.

My non-major students are permitted to buy reeds.⁴⁰

Many teachers expressed that non-major students were allowed to buy reeds. Many also indicated that they gave their younger students reeds to use until they achieved

³⁸ Ibid, 58–61.

³⁹ Ibid.

⁴⁰ Ibid, 64–65.

reedmaking independence. Information about texts used (often the teacher's own handouts or Light's and Weber's books⁴¹) and reedmaking materials and practices of the teachers themselves are also solicited. Unfortunately, this study does not inquire about the details of the student demographics in these teachers' studios, including the presence and percentage breakdown of music education majors, double majors, number of graduate students, or number of non-majors.

Both Rennick and Prodan solicit detailed responses from teachers about reedmaking habits, equipment used, measurements of the gouged cane, and characteristics of the finished reed. The underlying implication is that teachers model these reedmaking practices for their student; the questionnaires are in large part conducted to capture the specifics of the content taught. Rennick found that 91 percent of teachers recommend their own equipment preferences to students, demonstrating the link between teachers' preferences in their own reeds and what students learn.⁴² However, neither survey invites detail about pedagogical methods beyond instructional settings and guiding philosophy. Questions such as "How do you teach a student to crow the reed?" or "How do you teach the concept of balance in a reed?" might have illuminated specific pedagogical strategies beyond foundational content.

These survey instruments are somewhat flawed — for instance, neither employs a randomized sample, and neither describes validation procedures — yet they contain the only available data specifically about university-level oboe pedagogy and reedmaking practices. The inclusion in both studies of written responses about these strategies is a

⁴¹ Ibid, 65–66.

⁴² Ibid, 88.

testament to the teaching practices that arise, and these responses show how teaching practices vary depending on the institution and its students. These anecdotal responses demonstrate enough shared pedagogical concerns to suggest that fostering a dialogue among oboe teachers about teaching strategies — a literature of reedmaking pedagogy — would be of immense value.

Reedmaking and Undergraduate Education

Reedmaking pedagogy does not occur within a vacuum — it is but one of many undergraduate learning experiences, and necessarily interacts with the institutional, social, and societal issues that impact students who study music. Susan Wharton Conkling summarizes the factors that push for continued narrow training in professional music skills in the *Oxford Handbook of Music Education*:

The question of what undergraduates learn must be addressed in light of the ends for which the learning occurs, and contemporary universities aim for the economic stability of their graduates. Because economic models for the arts consistently show an oversupply of labor, most departments and schools of music define learning as a set of technical skills and knowledge, and they emphasize how much time students must invest in practicing these skills to become successfully employed. Such narrowly focused learning is not limited to music units, but is common in professional programs throughout the university.

This drive for specialized training is counterbalanced by the needs of students, who are in a transitional life stage:

The improbability of full-time employment as a musician may cause some undergraduates to question their choice of career path. Other undergraduates, who are in the midst of identity explorations, may find their interests well served by learning music, yet they may never intend to be employed in the field. Because instability also marks emerging adulthood, still others may begin with a major in music, yet they may later discover that their abilities and interests are better suited

to another field of study. It is from this intersection of economics and emerging adulthood that music learning must be viewed.⁴³

Information from two organizations enriches our understanding of how institutions address the needs of students beyond narrowly focused professional skills: the *Handbook* of the National Association of Schools of Music (NASM), an accrediting body for higher education in music, and data from the Strategic National Arts Alumni Project (SNAAP), an ongoing research project based at Indiana University that annually tracks arts alumni.

NASM is a membership organization, and the *Handbook* provides guidance for ensuring the quality of both undergraduate and graduate studies in music. For each undergraduate program, guidelines include recommendations about the experiences students should be afforded and skills students should demonstrate before graduation. A single set of General Studies Competencies, or suggested areas of study and skills to be acquired outside of the major, are recommended for undergraduates as follows:

1. The ability to think, speak, and write clearly and effectively.
2. An informed acquaintance with fields of study beyond music such as those in the arts and humanities, the natural and physical sciences, and the social sciences.
3. A functional awareness of the differences and commonalities regarding work in artistic, scientific, and humanistic domains.
4. Awareness that multiple disciplinary perspectives and techniques are available to consider all issues and responsibilities including, but not limited to, history, culture, moral and ethical issues, and decision-making.
5. The ability to identify possibilities and locate information in other fields that have bearing on musical questions and endeavors.⁴⁴

⁴³ Susan W. Conkling, "Understanding Undergraduate Music Learners," Oxford Handbooks Online, accessed April 16, 2017, <http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199935321.001.0001/oxfordhb-9780199935321-e-83>.

For institutions that are NASM-accredited, students in music are not only supposed to be acquainted with fields of study beyond music in their general education, they are advised to integrate outside fields into musical study to explore relevant musical questions, and engage in music activities that improve their abilities in thinking, writing, and speaking. NASM degree recommendations are for institutions of “narrowly focused learning” that Conkling describes, and it is worth noting that the organization asserts these intellectual activities not as contributing to a balanced liberal education for its own sake, but rather as important professional skills for musicians.

SNAAP collects and reports data that provide insight into the careers of arts alumni. SNAAP’s cumulative data pool suggests that approximately 61 percent of arts alumni work in an arts field, 63 percent were self-employed at some point, and 91 percent worked in a non-arts occupation for at least some period of time after graduation. Specifically within the field of music, about 50 percent of performance, music history, and composition majors spend at least some of their professional time teaching.⁴⁵ We can infer from such statistics that skills that are transferrable to other fields, or to multiple settings (performance and teaching, for instance), such as learning about one’s own learning style or developing project management skills, are important beyond the scope of an undergraduate degree.

⁴⁴ National Association of Schools of Music, *NASM Competencies Summary Degree: The BM in Performance, a Professional Undergraduate Degree*, accessed March 29, 2017, https://nasm.arts-accredit.org/wp-content/uploads/sites/2/2015/11/A_BM-Performance.pdf

⁴⁵ Danielle J. Lindemann and Steven J. Tepper, *Painting with Broader Strokes: Reassessing the Value of an Arts Degree, Based on the Results of the 2010 Strategic National Arts Alumni Project*, accessed March 29, 2017, http://snaap.indiana.edu/pdf/snaap_special%20report_1.pdf

Of the 39 percent of alumni not currently working in the arts, 62 percent reported that studying the arts in college fostered skills relevant to their current occupation.⁴⁶

SNAAP solicited written responses about the ways in which these alumni use their arts training in other fields, and provided the following representative summary:

Many of these alumni explicitly make the claim that, though their particular artistic techniques do not directly translate to their current working environments, there are certain cerebral elements of artistic training that aid them in their jobs today. As one respondent points out, “Although I no longer perform in the arts, my training in the arts helped me learn to think critically, which is crucial to my new work as an attorney.” Another arts graduate, who works in the healthcare industry, writes, “Graduating from an arts program gave me [a] clear ability to think outside the box which has been wonderful.”⁴⁷

Conkling synthesizes this information about the undergraduate music experience and suggests implications for institutional support:

Although music alumni appreciate intense artistic training, they rank other skills and knowledge, including collaboration, creative and critical thinking, and persuasive communication, as more important to their careers. This ranking might be explained in two ways. First, not all undergraduate music majors intend to seek a career in music. Therefore, these may be the competencies that are useful not only for artistic employment, but also for careers outside the arts. Alternately, the professional field of music may be changing to one in which flexible, generalist skills are sought to a greater degree than specialist skills, and in which collaboration and community engagement are valued over autonomous work. Perhaps a third explanation is that emerging adults’ identity explorations that lead to changes in major, as well as the changing nature of the music field, are linked to a far-reaching rethinking of liberal education. Assuredly, access to economic stability is still the overriding goal of an undergraduate education, but employers are focused on teamwork, problem solving, and innovation — even as they acknowledge that some specialized skills are required. Similarly, although higher education faculty and administrators continue to advocate for in-depth, focused study, they promote pathways of integration that link professional education with broader knowledge and skills.⁴⁸

⁴⁶ Ibid.

⁴⁷ Ibid, 13.

⁴⁸ Conkling, “Understanding Undergraduate Music Learners.”

Recent literature on teaching in higher education, including Fink, celebrates the benefits of active learning in the classroom, in contrast to more traditional lectures or teacher-centric models, for its ability to foster these types of generalist skills.⁴⁹ Learning reedmaking is inherently active and engaging. However, we as oboe teachers should be asking: Are broader aims for undergraduates' learning being achieved with reedmaking, and if so, are they being achieved through the teachers' intentions?

Toward a New Paradigm of Reedmaking Pedagogy

Clearly no subject can provide all the knowledge a student needs to succeed in life beyond the undergraduate degree, but the work of Fink and others demonstrates that the best courses transcend their fields and empower students to apply their learning experiences to real-life situations. Most music students, irrespective of career goals, are uniquely positioned in a long-term teaching relationship with the studio professor. The professor can promote and monitor the student's development of essential skills over the entire course of the undergraduate experience.

Reedmaking has traditionally been conceived of exclusively as a professional skill for those students who will have careers in performance. However, SNAAP's data and other research on music students, as characterized by Conkling, suggest that there are musicians who: (a) perform at a very high level, including in college, but have no

⁴⁹ Including: Elizabeth F. Barkley, *Student Engagement Techniques* (San Francisco: Jossey-Bass, 2009); John C. Bean, *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom*, 2nd ed. (San Francisco: Jossey-Bass, 2011); Charles C. Bonwell and James A. Eison, *Active Learning: Creating Excitement in the Classroom*. ASHE-ERIC Higher Education Report No. 1 (Washington, D.C.: The George Washington University, School of Education and Human Development, 1991).

intention to work in the music field; (b) enter higher education with the intent to perform, yet by design or happy accident add music teaching in private lesson, community music, or public school settings to their resume; (c) enter higher education with intentions to perform, and may even graduate with a performance degree, but seek employment in other fields. Continuing to play oboe beyond college may offer a greater sense of well being and enjoyment in life. Reedmaking can be, and arguably ought to be, important for all of these students. Oboe teachers should ask: how can reedmaking illuminate the talents of all students?

Even for students who will continue professionally in music performance, teachers may be concerned with building skills that serve the student beyond this competitive career path, and also with broadening their skills for a music field that continues to grow in its emphasis on generalist skills. This could be described as an “outside-in” approach — skills and modes of thinking that are not purely musical enrich the practices of the musical profession. The examples provided by SNAAP also demonstrate the value of a music degree for those students who will pursue careers in other fields. This “inside-out” approach helps students acquire skills in social, intellectual, and emotional modes of inquiry that are common in music, yet will be useful or advantageous in other contexts. The integrated nature of a Significant Learning curriculum is such that if high-quality musical fundamentals are paired with opportunities for Significant Learning, an inside-out approach can work in tandem with an outside-in approach.

It is clear from Rennick’s collection of pedagogical narratives that a high degree

of customization in teaching reedmaking is already occurring; teachers are developing learner-centric curricula for their specific studios whether or not they recognize it. But the tenor of teacher comments represented in Rennick's survey implies that, in many instances, customization tends to be reactive rather than intentional. Imagine other skills taught in a similarly reactive way, for instance, if students learned about only the harmonic sequences, tempi, and musical forms of pieces they were performing with the university's orchestra. Without a large-scale plan for the orchestra, students would leave school with large gaps in their musical understanding. So by analogy, if oboe students never encounter a well-planned, overarching view of reedmaking, or never grapple with a variety of reedmaking problems, they can leave their undergraduate institutions lacking essential skills and knowledge. We as oboe teachers should begin to investigate how a proactive, intentionally designed curriculum might be able promote learning not only of reedmaking skills, but also broader musical and non-discipline-specific skills.

Oboe teachers are already working to integrate reedmaking and performance goals for students within their curricula, but this does not imply that the teaching strategies for one area are analogous to those of the other. For instance, while both reedmaking and performance studies require the ability to develop mental models, performance models may be more abstract (such as the musical form of a piece being studied) and reedmaking models more concrete (the three-dimensional form of the reed's surface), and may require different teaching strategies. Furthermore, while many quality manuals exist about how to construct the reed itself, the absence of a literature of the pedagogy of reedmaking would seem to leave some pedagogical questions unanswered

(*e.g.*, “How do I teach a student who is imaginative, but struggles to work out physical problems with materials?”). It is clear from Rennick’s study that teachers of reedmaking do have strategies (some of which seem to go back to Tabuteau’s era or before) to help students with different skill sets and in different environments to achieve reedmaking, performance, and non-discipline specific skills (such as project management), but these pedagogical strategies are not captured in current publications.

Using Fink’s theory of Significant Learning and his corresponding process for course design promises oboe teachers the ability to document a pedagogy of reedmaking. It does not rule out retention of existing teaching practices that are serving students well; however, subjecting existing practices to the scrutiny of a framework that is not discipline-specific provides perspective on what a more reflective, systematic, and outward-looking pedagogy of reedmaking might look like.

CHAPTER THREE: AN OVERVIEW OF FINK'S THEORY

This project seeks to codify better learning outcomes for reedmaking in the collegiate oboe studio by reflecting on traditional pedagogical methods and imagining new pedagogical possibilities. There are no doubt a variety of resources that could frame this discussion, but I have chosen Fink's book *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses* for its clear, step-by-step method that invites reflection and reinvention in any discipline. Fink not only provides his own theories of teaching and learning, he cites other scholarship that has arrived at similar conclusions, all with the core values of lifelong learning and self-improvement for teachers and students alike.

The design of this project's pedagogical review follows Fink's course-planning process, and it demonstrates the degree to which a well-designed reedmaking curriculum is integrated, both among its internal elements, and within a broader musical education. I view it as an invitation for all teachers of oboe reedmaking to evaluate their pedagogical processes, and I use it here to open a dialogue about pedagogical practices that will serve all of our students and our own reedmaking.

In this chapter, I provide an overview of Fink's theories and design process to help familiarize the reader with his recommendations before the specifics of reedmaking are incorporated. In the following chapter, I detail each step of Fink's process, in tandem with other relevant literature, within the imagined setting of a generalized undergraduate-focused oboe studio.

Fink's Approach

In the opening of his book, Fink provides a call to action for teachers by examining how teaching in higher education is perceived. Since the 1980s, leaders in education, business, and government institutions have observed that students' intellectual and emotional growth may stop during the undergraduate years. While students may demonstrate mastery of a given subject for a final exam, some researchers have demonstrated that students leave college with nearly the same amount of knowledge and the same worldview they had when they entered. In *Our Underachieving Colleges*, former president of Harvard University Derek Bok explained:

Despite the favorable opinions of undergraduates and alumni, a closer look at the record . . . shows that colleges and universities, for all the benefits they bring, accomplish far less for their students than they should. Many seniors graduate without being able to write well enough to satisfy their employers. Many cannot reason clearly or perform competently in analyzing complex, non-technical problems, even though faculties rank critical thinking as the primary goal of a college education. Few undergraduates receiving a degree are able to speak or read a foreign language. Most have never taken a course in quantitative reasoning or acquired the knowledge needed to be a reasonably informed citizen in a democracy. And those are only some of the problems.⁵⁰

Consequently, employers and professional organizations have called for college education that goes beyond narrow professional preparation and includes critical thinking, intercultural communication, community and global citizenship, and collaborative problem solving.⁵¹

Even students have suggested that they are not learning as much as they could

⁵⁰ Derek Bok, *Our Underachieving Colleges: A Candid Look at How Much Students Learn and Why They Should Be Learning More* (Princeton, NJ: Princeton University Press, 2006), 8.

⁵¹ Fink, 15–20.

learn. Fink’s response to these concerns is a theory of Significant Learning, which he developed to capture the common goals of a multiplicity of approaches to active and problem-based learning; tools from any one of them can be included in specific course design. Fink describes the goals of this integrated approach:

First of all, it means that we want students in our courses to do something more than just put information about the course content into their short-term memory. Research has shown that this kind of learning results in most students not being able to recall this information even a short time later. By contrast, significant learning is learning that makes a difference in how people live — and the kind of life they are capable of living. We want that which students learn to become part of how they think, what they can and want to do, what they believe is true about life, and what they value — and we want it to increase their capability for living life fully and meaningfully. This ambitious goal in teaching has two requirements. First, it requires multiple kinds of specific learning by students, that is, something more than understanding and remembering discipline-related information . . . Second, significant learning requires that we help students connect what they learn in our courses with their “life file” rather than just with their “course file.”⁵²

In the introduction to this project, I described a disconnect between reedmaking pedagogy and students’ overall musical and liberal arts education. Using the tools of Significant Learning, reedmaking can become integrated not only with students’ music education, but with their “life file” in a multifaceted way.

Significant Learning — An In-Depth Look

Significant Learning emerged out of Fink’s experience with course design. He described Significant Learning as a taxonomy, and he compared it to Benjamin Bloom’s well-known taxonomies of educational objectives. Bloom’s cognitive taxonomy includes six types of learning, arranged hierarchically. But Fink pointed out:

⁵² Ibid, 7.

Individuals and organizations in higher education are expressing a need for important kinds of learning that do not emerge easily from the Bloom taxonomy, for example, learning how to learn, leadership and interpersonal skills, ethics, communication skills, character, tolerance, and the ability to adapt to change. [Fink's] interpretation of the aforementioned statements is that they are expressing a need for new kinds of learning, kinds that go well beyond the cognitive domain of Bloom's taxonomy and even beyond cognitive learning itself.⁵³

Like Bloom, Fink includes six areas in his taxonomy and he describes the “special value” of each area:

- ***Foundational Knowledge***: provides the basic understanding that is necessary for other kinds of learning.
- ***Application***: allows other kinds of learning to become useful.
- ***Human Dimension***: informs students about the human significance of what they are learning.
- ***Caring***: When students care about something, they then have the energy they need for learning more about it and making it a part of their lives. Without the energy for learning, nothing significant happens.
- ***Learning How to Learn***: enables students to continue learning in the future and to do so with greater effectiveness.⁵⁴

Fink's taxonomy of Significant Learning is not hierarchical, “but rather relational and interactive . . . each kind of learning is related to the other kinds of learning . . . achieving any one kind of learning simultaneously enhances the possibility of achieving the other

⁵³ Ibid, 34.

⁵⁴ Ibid, 34–7.

kinds of learning as well.”⁵⁵ While it may be tempting to prioritize Foundational Knowledge, Fink explains that the interaction between the six areas of Significant Learning creates a learning environment in which “teaching is no longer a zero-sum game. That is, teachers don’t automatically have to give up one type of learning to achieve another. Instead, when a teacher finds a way to help students achieve one type of learning, this can in fact enhance, not decrease, student achievement in the other kinds of learning.”⁵⁶

Reaching a goal of Significant Learning relies substantially on a teacher. Fink suggests that, at any level, a teacher has responsibility to: (a) know the subject matter, (b) design instruction, (c) interact with students, and (d) manage a course.⁵⁷ Through systematic observation of undergraduate teaching, Fink has found that few faculty members understand course design:

Most faculty members simply follow the traditional ways of teaching in their particular discipline. They lack the conceptual tools they need to significantly rethink and reconstruct the set of teaching and learning activities they use. In my experience, of these four basic aspects of teaching, faculty knowledge about course design is the most significant bottleneck to better teaching and learning in higher education.⁵⁸

Effective course design allows teachers to address persistent problems in their classrooms such as low student engagement or understanding (by using active learning strategies to achieve big significant learning goals), explore new ideas about teaching within an organizing framework (by using Fink’s theory as a guide to research-informed practices),

⁵⁵ Ibid, 37.

⁵⁶ Ibid.

⁵⁷ Ibid, 26.

⁵⁸ Ibid, 27.

and describe improvements in learning to institutional leaders (by making measurable improvements to student achievement or connecting learning goals to larger institutional goals). But perhaps most importantly, it provides teachers a path to realizing their most daring dreams for student learning — the types of dreams that change students’ lives for the better.⁵⁹

Overview of Integrated Course Design

In response to the body of research regarding the needs of today’s students, Fink poses a question: “If one accepts the associated premise that higher education is and ought to be moving toward a learning-centered approach, then the question arises, ‘How can teachers do a better job of creating significant learning experiences for students?’”⁶⁰ His solution is to ingrain Significant Learning experiences in all aspects of the course through deliberate choices in design. When an environment conducive to Significant Learning is designed into every part of the course, from the texts and other media that inform the course, to in-class activities, to feedback and grading, the course is fully integrated towards the goal of meaningful learning and lasting change.

In contrast to this type of integrated course design, Fink describes two typical approaches used by professors. The first, which Fink cites as particularly common among inexperienced faculty (but also among some that have been teaching many years), is the “list of topics” approach.⁶¹ In this method, the teacher considers the subject and picks between eight and twelve major topics to cover during the course, usually primarily

⁵⁹ Ibid, 28.

⁶⁰ Ibid, 67.

⁶¹ Ibid, 68.

through lecturing, and evaluates students through a few exams or papers. The second type, the “list of activities” approach, uses more active forms of learning in the classroom to cover the same “list of topics,” but similarly does not integrate the activities with larger learning goals: “on what basis does the teacher put the case study in week two rather than somewhere else, for example?”⁶²

Teachers of oboe reedmaking are unlikely to strictly follow the first approach, due to the hands-on nature of reedmaking. The oral tradition of teaching reedmaking resembles an apprenticeship more than the lecture hall, with students observing their own teachers’ reedmaking and receiving small bits of input about reeds as needed. However, this example demonstrates how active learning doesn’t necessarily achieve Significant Learning. One can imagine reedmaking being taught in such a way where students have regular meetings with their teacher, and experience making many reeds, but leave their undergraduate experience with a sense that reedmaking is an assortment of tips and tricks. Therefore, they are unable to improve their reedmaking beyond a functional level, and they have no resources to solve novel problems as they arise after graduation.

The third and best option Fink presents is integrated course design in which “the teacher takes responsibility for deciding what would constitute high-quality learning in a given situation and then for designing that quality into the course and into the learning experience.”⁶³ Fink’s course design process has three main parts. The initial phase, “Build Strong Components,” includes constructing and contextualizing the primary elements of the course. The second phase, “Assemble the Components into a Coherent

⁶² Ibid.

⁶³ Ibid.

Whole,” is concerned with the overarching structure of the course and its teaching strategy. The final phase, “Finish Important Remaining Tasks,” is where the details such as grading, syllabus writing, and creating systems of feedback and evaluation occur. The three components must be determined in integrated manner so that they reinforce each other, all according to the situational factors of the institution. At each stage of the process, Significant Learning goals are the driving force; if any component of the course does not complement these goals or support other elements of course structure, there is missed opportunity for Significant Learning. Remember that a core tenet of the theory of Significant Learning is Foundational Knowledge does not exist in a vacuum — content is more likely to be put to use after the course ends when it is integrated with such components as application, self- and other-understanding (Human Dimension), and learning to learn.

In the next chapter, I work through the details of course design for reedmaking, which may or may not be offered as a course for academic credit. I present situational factors common to most higher education institutions, although in further application and development, teachers should consider their own institution more specifically. My primary audience is other oboe teachers, who can use this model to evaluate how well their own reedmaking teaching works to achieve larger musical and developmental goals for their students; however, other musicians who teach undergraduates may also see potential in this model of course design.

CHAPTER FOUR: APPLYING SIGNIFICANT LEARNING TO REEDMAKING PEDAGOGY

This chapter describes course design in reedmaking according to Fink's twelve-step design process.⁶⁴ It is important to note a critical difference between Fink's process and the pedagogical environment of the music performance studio. Fink's process is intended for semester-long courses, and is especially geared toward those on topics new or unfamiliar to students. With the exception of one-time masterclasses or other programs of discrete length, such as summer festivals, performance lessons at the college level are taught over a period of years.⁶⁵ As all teachers know, the nature of student learning in performance is not always linear, nor consistent from student to student (think of the range of skills and abilities that exist even in a performance-oriented studio at a top conservatory). Although Fink does not include examples of long-range curricular design, we can assume that a four-year curriculum would be as integrated as a single course toward Significant Learning goals. It is necessary to make this distinction, as the following discussion of course design assumes long-range teaching strategy, not a semester-long, discrete course in reedmaking.

⁶⁴ Fink, 74–75.

⁶⁵ Although the incorporation of music study into modern academic institutions has provided a temporal framework for teaching and evaluation of student progress in the use of semesters, years, and course credits, the teaching traditions of the past, during which our reedmaking pedagogy was developed, lacked this structure. Oboists originally studied as apprentices for many years, often within musical families. Later, at institutions like the Paris Conservatory, the parent pedagogical institution for American oboe playing, a student studied not for a set period of time in pursuit of a degree, but rather until he won the annual *concours* for his instrument. This singular emphasis on skills achieved (an extreme and narrow example of learner-centric teaching) stands in stark contrast to graduation via completion of course credits in modern college settings.

This chapter explores possible design for a reedmaking course that is offered each semester of college study, and assumes a variety of student skill levels and career intentions as is typical in a college or university oboe studio. As applicable, observations for long-range curricular design are included. Descriptions of reedmaking pedagogy that have been collected and documented are cited as applicable, but the scarcity of this information requires that my personal, anecdotal evidence is also a major source.

Fink never advocates for an outright rejection and abandonment of teaching methods that were used in the past for the sake of reinvention alone. If a teaching tool is effective, it will have a place in his framework. Teachers of oboe should not fear that our traditions will be lost in the process of evaluating our own practices. Rather, being able to express what makes these traditional teaching methods effective will not only allow us to seek new methods for our toolboxes for new situations, but will also give us language to express the value of our teaching to non-oboists, who can never truly understand the nuances of our art.

Effective course design for reedmaking in pursuit of Significant Learning promises the opportunity to build a vocabulary of teaching and learning for college oboe teachers, consider situational factors beyond the studio and how they influence today's students, and evaluate traditional pedagogical methods for their efficacy in today's institutions of higher education.

Fink's Initial Phase: Build Strong Primary Components

In this phase, the teacher collects important information about the course and its students, identifies Significant Learning goals, and chooses learning activities and feedback mechanisms appropriate to these goals. This is followed by reassessment of the integration of all of these factors.

Identify Important Situational Factors

In this step, the teacher evaluates information about students, the institution, the course structure, and the nature of the subject to design a unique, environmentally responsive course. Fink provides a series of questions about situational factors that help reveal some of the challenges and opportunities unique to reedmaking and the educational setting in which it occurs.⁶⁶

Specific Context of the Teaching and Learning Situation

Evaluate the setting in which teaching will occur.

Number of students. This number may fluctuate greatly depending on the institution. Many small colleges may hire an adjunct oboe teacher for one student; larger research universities may have up to twenty students in the studio.

Level of students. What is the degree level of the students? This project focuses on undergraduate learners; teachers with studios that include graduate students will need to take this into account in designing their own courses. Many studios may also have more upper-division students than lower-division within the undergraduate degree program, due to the institutional difficulty of entering the music major in later years of

⁶⁶ Fink, 76–78.

undergraduate studies, and relative ease of leaving the major.

Length and frequency of class meetings. Reedmaking is not consistently offered for course credit.⁶⁷ When credit is offered, it is often an unstructured independent study with the professor. This offers both an opportunity and a challenge for the teacher — the flexibility to hold class in any configuration that is most beneficial for their students, including one-on-one lessons, weekly group class, or simply including reedmaking in lessons. The lack of course credit may invite other problems such as lack of space for teaching the class, or difficulties in devising a good method of grading.⁶⁸

Delivery of the course (live, online, combination). The physical nature of reedmaking skills seems to necessitate teaching in real life, but there are perhaps untapped opportunities to augment learning through digital interactions.

Expectations of External Groups

What obligations does the teacher have to those outside of the studio?

Expectations of society at large. This may include societal assumptions about the subject, professional standards and expectations, and general expectations about college learning. Expectations from the musical profession about musical and technical competence in which reedmaking clearly plays a large role certainly come into play. For those students who will pursue careers as professional performers, the scarcity of jobs requires that students are competent reedmakers. For those who will pursue another

⁶⁷ Rennick, “Oboe Reed-making Pedagogy,” 59. Only 32 percent of institutions included in this survey offered course credit for reedmaking.

⁶⁸ Rennick, “Oboe Reed-making Pedagogy,” 58–61. Survey responses indicated that oboe teachers currently employ a variety of strategies for grading, from treating reedmaking as a co-curricular activity that is not graded, to including reedmaking as a percentage (up to 25 percent) of the lessons grade.

career, the necessity of making professional-quality reeds is not always imperative, but it greatly enhances their overall performance study and, I argue, augments opportunities for Significant Learning. Societal expectations about why we study music at all—such as to achieve sense of mastery, to gain self-confidence, and to enjoy artistic processes—as well as why we perform music—such as for rituals and for human connection—also play a role because reedmaking is such an essential part of oboe playing.

Curricular goals of the institution or department. Fink suggests that professors take into account why the course is offered by the institution. Is it a required course in the major or an elective liberal arts course for the university population at large? In the case of reedmaking, I suggest instead that teachers consider curricular requirements of their student's majors, such as recitals and graduate school auditions for performance majors, theses and capstone projects for composition majors or Bachelor of Arts in Music students, secondary instrument lessons and student teaching for Music Education majors, and labs or other time-consuming requirements for non-music majors. Many undergraduate students have a double or triple major, and some may express a sentiment that the music major is their "fun" major or passion project. Other students want to pursue music, but are doing so conditionally upon having another "practical" major at their parents' request. In all cases, the teacher must gain an understanding the individual student, his or her personal goals for oboe performance, and what time is available to invest in reedmaking. Knowing what lies ahead for each student will help the oboe teacher plan for performance and reedmaking learning experiences, and maximize their benefit to each student. However, the many and diverse goals represented in a single oboe

studio suggest that multiple modes of delivering Significant Learning experiences will be needed.

Nature of the Subject

What are the inherent qualities of the subject, and what teaching approaches or accommodations might these require?

Theoretical vs. Practical. Does the subject deal with theories and abstract concepts, or is the goal of the course to learn to do something? Clearly, reedmaking is about “doing,” but traditional pedagogy has often emphasized concept over action. Having a vision for an ideal reed, controlling for variables, and then following the order of operations by which this can be achieved are the hallmarks of good reedmaking.

Convergent vs. Divergent. Convergent thinking strives to find a single best answer; divergent thinking offers multiple valid answers or points of view. Knowing which typifies aspects of a given course informs the design of the course, from its sequence to its teaching activities.

Reedmaking requires both convergent and divergent thinking. Take for example, the reedmaking books by Evelyn Rothwell and Jay Light. Rothwell was a prominent English oboist and pedagogue, and Jay Light wrote one of the best-respected books on reedmaking in the American style. Both emphasize the need for reeds that are responsive in all registers, allow for expressive and dynamic range, play in tune, and have nice tone; that is, they are convergent on the function of the reed and its importance in high caliber playing. However, they advocate differences in the construction of the reed itself to achieve differences in national sound concept. Light and Caldwell’s reedmaking styles

typify the convergent thinking of reedmakers within a national style about ideal tone, and the divergent thinking among national styles.

Cognitive vs. Physical Skills. Like playing an instrument, reedmaking is both a cognitive and physical activity. One must have an idea of how to make and fix a reed, but also the physical skills to tie a good blank or scrape with finesse. Teaching reedmaking requires addressing both of these areas.

Is the subject stable, undergoing a period of change, or wrestling with competing paradigms? This question concerns whether the field itself is changing. Unlike some other fields, like ethnomusicology, which has changed throughout the past decades as the field shifted from colonialist, data-heavy research to culturally-informed study that rejects Eurocentric viewpoints, reedmaking itself has not changed dramatically since the invention of the oboe. Perhaps there are “competing paradigms” in reedmaking — different physical properties of reeds based on the type of music being played, such as solo vs. orchestral music, new music vs. baroque music, and so forth. Multiple ideals of reeds are possible and depend upon the circumstance of performance.

However, the competing paradigms of the oral tradition of reedmaking and its sometimes inelegant adaptation to a modern collegiate setting present a challenge. Reedmaking is a complex subject that is not easy to package into a semester-long comprehensive course. Oboists studying in the nineteenth century did not typically plan to pursue careers other than as musicians, and while finding a career in music has always been competitive, the phenomenon of amateur oboe playing is a recent one. Those students who study oboe in college with double or triple majors face curricular challenges

unlike those faced by conservatory students of the nineteenth century. While the nature of the subject may have stayed the same, the learning environments, and in some respects the learners, have changed a great deal.

Characteristics of the Learners

Life situation. The personal lives of students clearly impact their needs in a course or a curriculum. Most music students will tend to be of similar age and live similar lives, especially in the context of undergraduate and graduate degree programs, but other personal factors influence their studies. An important factor for many students is financial background. Students who can afford a nice instrument and can purchase any reedmaking tools and supplies as needed face fewer barriers to mastery than their peers who struggle with subpar equipment. Just as the purchase of a professional instrument is an important milestone in an instrumentalist's development, the capacity of an oboist to purchase a gouging machine or shaper tip is critical to developing reedmaking professionalism. This of course, must be weighed with career goals (a student who intends to go to law school may not want to invest \$2,000 in a gouging machine, for example). Institutional resources, such as instruments available for borrowing, grants and scholarships, and the tools available in the reed room, can be transformational for students from less financially privileged backgrounds. Understanding these limitations informs pedagogical plans.

Life and professional goals. As discussed in the previous chapter, each student has unique personal and professional goals and a vision for how music fits into achieving such goals. The goals of learning reedmaking will be similarly varied. Music education, composition, performance, theory, double majors, and non-majors will all have different

needs for reedmaking pedagogy. If we believe that learning to make reeds holds value for all students, explicitly tying that value to their life and professional goals will amplify its impact.

Reasons for enrolling in the course. Students' reasons for enrolling in the course will be tied to their broader personal and professional goals. When reedmaking is offered for course credit, is it as an independent study? If so, does this course offer elective credits to fill out a student's schedule in an otherwise busy semester with no extra obligations than in other semesters, or does it entail extra work or a reedmaking based project? I have certainly encountered both iterations of reedmaking courses; each teacher will have to decide this based on institutional expectations.

Prior experience. Oboe students enter college with varying experience levels in reedmaking. Some students may have been making reeds for five or six years already at the start of undergraduate studies, others may have basic scraping skills to adjust reeds, and still others may have essentially no reedmaking knowledge. Balancing the learning needs of a group of students with varied skill levels will prompt any teacher to evaluate the usefulness of group interactions versus one-on-one lessons, the topics covered in classes or lectures, and the mode(s) of instructional delivery.

Unfortunately, some students arriving on campus with reedmaking experience may also bring with them anxieties about reedmaking and reeds based on previous disappointing performance experiences or negative learning interactions. Some may even be mimicking the attitude of a former teacher who had his or her own reed-related anxieties. Like a math teacher who must find a way to convince trepidatious students that

they are capable of calculus, the oboe teacher may need to find a way to address negative experiences that hinder further learning. Other students may display another variety of anxiety: resistance to change. Students who achieved a degree of performance and reedmaking success prior to college may resist making changes to their reeds that are necessary for further musical improvement. Teachers should develop teaching strategies that honor students' previous positive and negative experiences with reedmaking when they are in impediment to progress.

Multiple intelligences. Keri McCarthy's dissertation research applied the insights of Gardner's multiple intelligences to teaching in the oboe studio, through the use of intelligence-specific learning activities for the study of repertoire, including practice methods, memorization tools, and activities for teaching musical expression.⁶⁹ Similar research could be explored for the pedagogy of reedmaking, perhaps most easily in the realms of logical-mathematical, bodily-kinesthetic, and spatial intelligences, but also in the other intelligences through the application of Significant Learning principles.

Characteristics of the Teacher

These prompts ask the teacher to evaluate their competence in the subject and their teaching skills.

Prior experience, knowledge, skills, attitude about the subject. Oboe teachers will all have knowledge of reedmaking and experience making their own reeds. Each teacher will bring varied skills to and specialties to reedmaking, such as expertise in

⁶⁹ Keri McCarthy, "A Study of Howard Gardner's Theories of Multiple Intelligences and Their Applications in the Collegiate Oboe Studio," (DMA diss, Indiana University, 2004).

gouging machines or other equipment, or in making reeds for specific repertoire needs (such as extended techniques or chamber music), that can enhance their curriculum. Conversely, teachers may harbor their own anxieties about the difficulty of making reeds or insecurities in specific skills. Perhaps this is to be expected — reedmaking is complex and can be unpredictable, and we are only human. But making sure to reflect upon one’s own attitudes or reedmaking insecurities can help teachers avoid modeling such attitudes for their students during the learning process or designing a “defensive” or negatively-framed curriculum.

Teachers may consider using team teaching within the institution, guest masterclasses, or summer festivals as a way to augment their expertise and counterbalance their idiosyncrasies, in reedmaking as in other aspects of performance. Conceptualizing these outside influences as a regular part of the oboe studio curriculum may increase opportunities for Significant Learning experiences for students.

Previous experience teaching the subject. Experienced teachers of reedmaking will have their own toolbox of analogies, diagrams, and advice to guide students of different levels. Still, some oboe teachers may have many years of experience making their own reeds, but little experience in teaching the craft to others. For newer teachers, imitating successful classes they attended as students, using available reedmaking books, or seeking other reedmaking resources may provide them with multiple approaches to conveying information about any given part of reedmaking.

How much does the teacher know about effective teaching? Most performers have no formal training in teaching. While some teachers may have a background in

music education, this training is primarily focused on primary and secondary education. Almost all of them model their studio teaching on their teacher's methods, at least to some extent, and few will have deeply studied literature on learning in higher education even in the course of a doctoral degree. Others with performance degrees may have enrolled in only a single pedagogy class in their musical education, and it may or may not have been instrument-specific. The existing literature on reedmaking confirms this observation—there are no resources on the pedagogy of reedmaking available to oboe teachers. Citing these existing reedmaking handbooks as discussions of reedmaking pedagogy is akin to calling a science textbook a source of information on science education: it is possible to reverse engineer the writer's pedagogical approach based content and its mode of delivery, but there is no direct discussion of teaching practices taking place. Teachers who have earned a Doctor of Musical Arts degree, in principle, should have more preparation for teaching, but the availability of college teaching coursework, and opportunities for gaining teaching experience under the supervision of faculty, is highly dependent on the institution. Fortunately, many institutions now have centers for effective teaching on campus, like the Instructional Development Program (now the Center for Teaching Excellence) that Fink directed at the University of Oklahoma, that may help by offering doctoral-level courses, supporting teaching experiences for graduate assistants, and providing faculty assistance and development programs.

Fink believes that teachers know what transformative, learning-centric teaching feels like, but they may struggle to achieve it in their own classrooms. Indeed, in music

performance, we know or can imagine the studios of highly successful performance teachers. It does not seem to be the sheer superiority of their musicianship that makes them effective teachers; indeed plenty of well-known performers are not particularly celebrated for their teaching. It seems more likely that the best performance teachers are able to teach the whole student in a way that transforms them into the best musician they can be — physically, mentally, emotionally, and for a lifetime.

Special Pedagogical Challenge

Fink suggests synthesizing all of these situational factors into a unique, concise pedagogical challenge that characterizes their course. He prompts, “[W]hat is the special situation in this course that challenges both students and teacher to make this a meaningful and important learning experience? If the teacher can find a way to successfully meet that challenge, the chances of the course being a success for the students are high.”⁷⁰ I suggest the following as the special pedagogical challenge for teaching reedmaking:

Oboe playing is all about the reeds, but it is not about the reeds at all.

The reed may be the primary determining factor in the sound we are able to produce on the oboe. But to fixate on the reed alone misses the larger goal of the endeavor — to make music artfully, freely, and with integrity, to achieve the larger purposes of music — communication and commune with others for artistic, educational, ritualistic, or even therapeutic purposes. Without larger musical ideals guiding us, reedmaking becomes an arbitrary craft, and yet, without a good reed, we cannot hope to achieve our musical

⁷⁰ Fink, 80.

ideals. Thoughtfully helping students balance reedmaking with communicative, collaborative, and mature musicianship is the special pedagogical challenge of teaching reedmaking.

At this point in Fink's process, the teacher has gathered all situational factors related to their institutional setting, their students, themselves, and the unique challenges in the subject of reedmaking. Systematically and explicitly identifying these factors is a necessary first step in evaluating to what degree one can teach as they were taught. That is, which aspects of typical reedmaking training apply in this situation, and which do not? How will the teacher go about teaching? That is the subject of the next section.⁷¹

Generate Significant Learning Goals

After considering the situational factors of the course, the teacher generates learning goals for students. This is not a list of topics to be covered or assignments; rather, these goals articulate what the student will get out of the course. How will they be changed as learners and citizens? What skills might they gain? These should be big goals that relate to Fink's Taxonomy of Significant Learning in some way.⁷²

Some suggested learning goals for teaching reedmaking are:

- Student is a confident, independent reedmaker.

⁷¹ For the purpose of explicitly connecting Significant Learning goals to historical, modern, and imagined teaching and learning activities for reedmaking, I will deviate from a precise outline of Fink's course design process, combining steps 2 (identify important learning goals), 3 (formulate appropriate feedback and assessment procedures), and 4 (select effective teaching and learning activities) of Fink's course design. True integration (step 5) may be achieved only in specific individual circumstances.

⁷² Fink, 38–39.

- Student understands how to evaluate reeds and reedmaking equipment.
- Student can make reeds that enable and enhance mature musicality and artistry.
- Student sees connections between reedmaking and other realms of learning.
- Student has resources to keep making and learning about reeds on their own.
- Student cares about the quality of their reeds as a part of overall musical professionalism and artistic integrity.
- Student collaborates to solve reedmaking problems and effectively communicates reedmaking knowledge with others.

Contrast these goals with the *de facto* goals of an unplanned reedmaking curriculum:

- Student has a reed for tomorrow's concert.
- Teacher is not embarrassed by student's reed at school-wide concert.
- Student can physically make a reed that makes sound.
- Student's reed works well enough to get through this lesson.
- As long as the student has a working reed, they don't need teacher's help musically.
- Student adopts the views of the teacher on reedmaking, even if they are negative or self-loathing.

With Significant Learning, the teacher adopts a proactive rather than a reactive stance.

Teaching reedmaking of course requires flexibility from the teacher in how to address individual student challenges that may arise; however, allowing the curriculum to be dictated by these challenges cannot lead to the best learning outcomes. Imagine, as analogy, English teachers whose only preoccupation is that students do not make grammatical errors. This type of teaching will never produce a Faulkner; we should

similarly wish for more for our student reedmakers.

Each of the model learning goals interacts with the six areas of Significant Learning in some way (Figure 5.1).

Learning Goal	Areas of Significant Learning
Student is a confident, independent reedmaker.	<p><u>Foundational Knowledge</u>: understands how the reed functions, and how to use appropriate tools to make a reed</p> <p><u>Application</u>: uses principles of how reeds work to troubleshoot independently</p> <p><u>Integration</u>: views reedmaking as multidimensional project management</p> <p><u>Human Dimension</u>: no fear of failure in reedmaking or development of unhealthy habits</p>
Student understands how to evaluate reeds and reedmaking equipment.	<p><u>Application</u>: uses basic knowledge of reeds to compare reeds to one another and choose tools that enhance reedmaking</p> <p><u>Integration</u>: applies knowledge to and interacts with other areas, such as engineering, design, acoustics</p> <p><u>Human Dimension</u>: develops self-understanding, so that reedmaking suits unique physiology and playing tendencies; shows awareness of others' choices</p> <p><u>Learning to Learn</u>: moves from making evaluations with the help of the teacher to making independent evaluations</p>
Students can make reeds that enable and enhance mature musicality.	<p><u>Foundational Knowledge</u>: understands variation in tone color, phrasing, style, both in terms of historically situated repertoire and types of ensembles, and how reedmaking choices can enhance this musical knowledge</p> <p><u>Application</u>: uses reedmaking knowledge toward musical ends; changes reeds to achieve varied musical ends</p>

	<p><u>Caring</u>: values reedmaking as an part of the music making process</p> <p><u>Human Dimension</u>: values a good reed for its expressive and communicative potential</p>
<p>Students make connections between reedmaking and other areas of learning.</p>	<p><u>Integration</u>: connects reedmaking principles with other knowledge (e.g. acoustics, design, art history, studio art, historical performance); invites peers from other majors to experience reedmaking</p> <p><u>Application</u>: applies principles learned in reedmaking to other parts of life (project management, problem solving, aesthetic judgment)</p> <p><u>Learning How to Learn</u>: translates reedmaking understanding in order to teach others</p>
<p>Students have resources to keep making and learning about reeds on their own.</p>	<p><u>Foundational Knowledge</u>: has invested in the basic tools necessary for reedmaking on their own</p> <p><u>Application</u>: manages their own reedmaking plan, can make reeds for others, including younger students</p> <p><u>Caring</u>: wants to improve their reedmaking outside of school setting</p> <p><u>Learning How to Learn</u>: evaluates resources for their usefulness; designs their own learning experiences; seeks advice from experts beyond their studio teacher</p>
<p>Students care about the quality of their reeds as a part of overall musical professionalism and artistic integrity.</p>	<p><u>Caring</u>: values musical maturity and professionalism</p> <p><u>Human Dimension</u>: develops and uses professional skills; values teamwork and collaboration</p> <p><u>Integration</u>: demonstrates musical consistency through quality reedmaking</p>

<p>Student collaborates to solve reedmaking problems and effectively communicates reedmaking knowledge with others.</p>	<p><u>Human Dimension</u>: shares reedmaking knowledge with peers, students, and non-oboists</p> <p><u>Integration</u>: communicates clearly about interaction of reedmaking with other areas</p> <p><u>Learning How to Learn</u>: recognizes when collaboration can enhance the learning process</p>
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Figure 5.1. Sample Learning Goals with Corresponding Significant Learning Areas

Oboe Teacher's Toolbox

The following Toolbox suggests Time Tools, Instructional Tools, and Resources that the teacher may take into account in designing learning activities and long-term curricular structure. In tandem with the Significant Learning goals, these tools will lead to the development of learning activities for a curriculum that works toward all six kinds of Significant Learning.

Time Tools

Lessons. Private, one-on-one lessons are the primary teaching tool in the studio, and for those who teach adjunct, it may be the only structured time with students. Whether or not reeds are taught in the lesson is up to the teacher and depends on situational factors. Lesson length may also be flexible at the discretion of the teacher — for example, hour-and-a-half-long lessons that include one hour of playing and half an hour of reedmaking. Teachers may also elect to give each student an individual reed lesson each week, separate from the primary lesson time.

Classes. Group reed classes are a common tool for teaching reedmaking in a studio setting. Reed classes may occur within the masterclass course, which is more likely to be offered for credit, or may be organized as a separate class meeting.

Other student interactions. Teachers may wish to make themselves available for reedmaking advice outside of these scheduled meetings, through email, video chat, or sharing digital photos. It may also be helpful to schedule meetings with students periodically for evaluation and feedback regarding progress in learning goals.⁷³

Instructional Tools

Texts. Teachers may elect to use texts on reedmaking as they see fit. Although many teachers do not use a reedmaking book as a course textbook,⁷⁴ using published works for their diagrams, explanations of reedmaking procedures, and advice on self-management may be helpful. There is an ever-expanding amount of information about reedmaking online as well, on websites of well-known performers, YouTube, or even the video-streaming website Twitch. Many teachers also develop their own handouts or informal texts for teaching reedmaking; for example, a favorite drawing of the reed and its parts.

Journaling. Student journaling can serve as a form of note taking, as a log of reedmaking data, and as a tool for reflecting on learning processes. It is an easy way to

⁷³ This is done successfully by Linda Strommen in her studio at Indiana University. Students meet with Strommen at the beginning and end of each semester to plan, make personal goals, and reflect on learning.

⁷⁴ Rennick, "Oboe Reed-making Pedagogy," 65–66. About 60 percent of teachers used a reedmaking manual in their teaching, but many emphasized that it was a resource, not an authoritative textbook. Seventy-two percent reported creating their own reedmaking materials.

create continuous learning experiences from interaction to interaction.⁷⁵

Leadership roles. Assigning students to leadership roles within the studio for various tasks (reed room monitor, master class set up, lesson scheduling) can encourage the development of professionalism and positive self-image, as well as create a cohesive, invested studio community.

Peer-to-peer instruction. Students discover a lot about themselves as learners when they teach others or compare learning styles. Assigning students to work through reedmaking issues with peers in a supportive community environment can help students simultaneously develop skills as reedmakers, colleagues, and as teachers themselves.

Resources

Space. Offering students space to work on reeds, such as the reed room or the oboe professor's office, makes it more likely that they will do so, especially if they are living in dormitories. This reedmaking space becomes a student-controlled learning community for the studio.

Other physical resources. Providing reed room equipment such as good lamps, gouging machines, shaper tips, planing boards, and expensive measurement equipment like dial indicators allows more students to have access to good equipment. This leads to better reeds, and can enhance students' sensitivity to equipment issues.

Financial resources. Grants offered by the institution can be used to help defray the cost of reedmaking equipment for students. There is also a tradition of students working part-time for the teacher doing something related to reedmaking (selecting cane,

⁷⁵ The appendix includes suggestions for journaling.

tidying their studio, working for their reedmaking business).⁷⁶

Resources within the institution. The school may offer services or courses that can augment reedmaking studies, such as counseling, Alexander Technique, physical therapy, yoga, or mindfulness training. Other faculty members are an invaluable resource for augmenting personal expertise in these and other areas.

Resources outside of the institution. Summer programs, master classes, and other oboe intensives offer students reedmaking instruction from a variety of perspectives and throughout the calendar year.

Using this toolbox, along with imagining new or adding institution-specific tools, bridges the gap between situational factors and the achievement of Significant Learning goals through well-chosen learning activities.

In Depth: The Six Areas of Significant Learning

Developing a course based on the Taxonomy of Significant Learning, rather than topics and exercises, shifts the course to a learner-centric model and therefore better serves the needs of individual learners. Here, I present the six areas of Significant Learning, each with a dedicated discussion of reedmaking goals, recommended learning activities, and options for feedback and evaluation.

Significant Learning Area 1: Foundational Knowledge

Fink defines Foundational Knowledge as “knowledge about the phenomena associated with the subject and the conceptual ideas associated with these phenomena.”⁷⁷

⁷⁶ Storch, *How Do You Expect to Play the Oboe*, 266–8.

⁷⁷ Fink, 83.

It is the essential information about the subject that students need to understand and remember. In the case of reedmaking, this includes the basic information about how reeds are constructed, how the parts of the reed function, and how this translates into sound. It also includes skills related to specific steps of the reedmaking process, such as how to shape cane or sharpen a knife.

It is worth noting again that existing texts on reedmaking focus almost exclusively on this aspect of reedmaking, and perhaps for good reason. But almost all of these texts also exhort the student to find a good teacher to help them learn reedmaking, indicating not only the tradition of imparting this Foundational Knowledge through active learning, but also perhaps also the centrality of the teacher's own reedmaking experience in how Foundational Knowledge is used in Application.

Foundational Knowledge includes:

- Required materials for reedmaking
 - Cane, thread, tubes, beeswax, ruler, etc.
- Scraped parts of the reed
 - Tip, heart, back, rails, spine, transition
 - Which parts of the reed produce what aspects of the sound, and how these parts interact
- How to tie a reed
- How to sharpen a knife
- Mechanics of scraping, where to scrape, order of scraping different parts of the reed to take it from blank to crowing
- How to crow a reed

- Typical measurements for dimensions of the reed (tie length, thickness of cane, how high to start the tip)

Learning Activities

The tradition of teaching reedmaking offers multiple models for conveying the information of Foundational Knowledge. Many oboists will remember learning the basics of how to make a reed while sitting at their teacher's reed desk for one-to-one lessons. These lessons are a prime example of active learning — students learn what they must do with tools in hand. In a studio environment that has many students, it may be more practical to deliver mini-lectures before allowing for practice. A hybrid of these two methods is possible, in the form of professor-led, hands-on lecture/activity sessions. In certain settings, it may be beneficial to group students of similar reedmaking experience levels together for group lessons.⁷⁸

There are several devices commonly used for teaching the basics of reedmaking, regardless of the size of the class. Using drawings of the reed shows its parts on a larger scale, and enlarging it to enhance nuanced detail that some parts of the reed require. Using a set of instructions, like a recipe for construction of the reed, is also typical. Most teachers of reedmaking likely have an arsenal of analogies to describe specific aspects of reedmaking (e.g. the back is the amplifier or sound box for the reed —it gives dynamic range to whatever the tip is doing). Some teachers give their students a sample reed to keep in their reed box for reference, or let students play on their reeds to learn kinesthetically. Finally, the use of existing texts or handouts developed by the teacher

⁷⁸ Care must be taken not to inadvertently shame students around their peers for needing 'remedial' or 'basic' help, which can dampen their enthusiasm for improvement.

provides basic information that can be reviewed and referenced by the student as they make reeds on their own, and can be used as a part of traditional reading assignments or other learning activities.

Evaluation

As in performance lessons, observing students as they do the activity is the primary form of evaluation and feedback. Confirming understanding of concepts by consistently soliciting questions from the student can reveal knowledge gaps or misinformation. After the first few exposures to the basics of reedmaking, asking the student to narrate their own reedmaking can help gauge understanding, as well as help students Learn How to Learn by reflecting on their own learning process.

Depending on the students and the studio environment, quizzes or worksheets may be helpful to foster recall of some information, such as the steps of tying a blank or good cane dimensions. For example, such quizzes would be especially applicable in a studio that has many incoming freshmen with little reedmaking experience. Quizzes could even be administered online as a student self-check for understanding, rather than a graded item, to save valuable in-person reedmaking instruction time.

Significant Learning Area 2: Application

Fink defines Application as “an ability to use and think about the new knowledge in multiple ways, as well as the opportunity to develop important skills.”⁷⁹ He prompts teachers to consider what types of thinking are important to foster, what skills students need to learn, and what complex projects they will need to manage.

⁷⁹ Fink, 83.

Reedmaking requires systematic analysis of one's own work, which leads to critical thinking about how the reed is not ideally functioning, and finally problem solving for how to fix it. Although reedmaking is complex, it does follow ordered, logical principles.⁸⁰ Students should learn to monitor how well they follow these principles, analyze and judge their own reeds, and finally, adjust them to make them better.

As students progress in reedmaking and performance skills, they gather new information (Foundational Knowledge), reflect, analyze, and formulate personal theories, and take "informed action" (Application). In the case of oboe playing, these cycles of learning for playing skills and reedmaking skills are intimately intertwined. For example, if the student makes a breakthrough in legato playing, perhaps by using more abdominal support, she will need to incorporate this new performance information with existing reedmaking knowledge to begin to make reeds that always allow her to use this new playing skill. Conversely, imagine a student learns to make reeds that are not loose on the sides, and therefore require less intervention from the embouchure. This reedmaking change can be applied and inform the physical skill of embouchure formation, and can ultimately help develop better musical results in pitch, line, and articulation.

Students learn about basic physical skills of constructing a reed in Foundational Knowledge activities. However, mastering these skills takes time and patience, trial and error. Making reeds at a professional level is a never-ending project to manage. Reeds need to be broken in, and they wear out after a relatively short amount of use. Good reedmakers tend to adopt an ongoing process of crafting reeds in order to maintain a

⁸⁰ For example, address problems from the tip down; a good reed can't be scraped from a poorly made blank, etc.

constant supply. Additionally, special performance occasions such as recitals, concerto performances, or auditions require preparing reeds in advance that can accomplish specific musical tasks. Learning how to manage a project with many details over a long period of time can be a challenging task for students, especially young ones who may be new to managing their own time as they begin college.

Learning Activities

A common reedmaker's tool, the use of playing tests to evaluate the quality of a reed, is an Application of Foundational Knowledge that is perhaps as old as the instrument itself. Accounts of oboists crowing reeds to evaluate them are found in some of the earliest tutors for the instrument.⁸¹ Clearly, using a set of stable principles (Foundational Knowledge) for how a reed should work, and observing them in objective tests (Application) is an indispensable tool in making good reeds. These tests are isolated and usually not based in repertoire, and typically show the reed's vibrations without the assistance of the lips or embouchure. The quintessential reed test, the thread crow, is recognized as the call of the oboist by instrumentalists of all ilks. Other tests, both on the reed alone, such as articulating or glissandi, or in the oboe, including testing the second octave notes for pitch or low register notes for response and depth, demonstrate the ability of the reed to do its job musically. These playing tests typically culminate in testing the newly made reed for the repertoire it might perform. In this way, all goals of good reedmaking could be seen as falling within the Significant Learning area of Integration — principles of good reedmaking are inextricably linked to principles of good

⁸¹ Kenneth Gene Evans, "Instructional Materials for the Oboe, 1695 – ca. 1800," (DMA diss., University of Iowa, 1963), 111.

performance and musicianship.⁸²

Another simple but powerful exercise is a journal or reed log. When students write about their own reedmaking, they are able to reflect on their process, compare these processes to Foundational Knowledge materials, and record problems that arise to review with the teacher in the next reedmaking lesson. This tool is particularly useful for teaching students to control physical variables, such as thickness of cane, length of time soaking the cane, or tie length.

Another traditional and obviously valuable teaching tool is having the teacher adjust the student's reeds. Sitting side-by-side, teachers evaluate and scrape the student's reed to get it closer to the ideal. By explaining the evaluation process verbally, weighing solutions to the reed's problems together, and then finally demonstrating the scraping solution, the teacher guides the student through the critical thinking and problem solving phases of reedmaking. The teacher may fix the reed to show the student what a well-made reed looks and feels like, or may watch the student fix the reed and can therefore coach physical skills like knife technique. When the student and the teacher each play the fixed reed, they can evaluate the physical differences in *how* the student plays the reed. This may reveal problems with the student's sound production, including air use and embouchure, or show the teacher what is required in a reed for this particular student's instrument or physiology. The best teachers should be able to distinguish the inherent

⁸² Application of foundational reedmaking knowledge interacts with foundational musical knowledge as well—the oboist's place in various historical styles, playing in tune, when color changes are needed, the differences between playing chamber and orchestral music. Understanding why one constructs a given reed, or picking reeds that are good candidates to fix for an upcoming performance, require musical knowledge.

needs of each student's physiology and accommodate them, while also pinpointing the technical issues that can be improved.⁸³

From this example of fixing the reed together, a core practice of reedmaking pedagogy, it is easy to see that reedmaking has *always* embraced individualized learning activities. By expanding this core concept to other aspects of reedmaking and music teaching, we will be able to develop even more sophisticated learner-centric pedagogies.

To help students develop project management skills, reed quotas of various types are useful. For example, a student may be asked to produce three reeds per week. As the student progresses in reedmaking, the quality required of these reeds can be increased (e.g. first semester freshmen focus on tying three good blanks; second semester freshmen must have three reeds scraped with the corners of the tip intact; juniors must produce three reeds that are possible options for their studio recital performance).⁸⁴

Finally, to enhance the environment for achieving Significant Learning goals in reedmaking, I suggest that it may be helpful to adopt a studio ethos of boldness. If students are to become confident, independent reedmakers they must not fear trying new approaches to solving reedmaking problems, nor rely too heavily on their teacher's expertise (i.e. only performing concerts on reeds the teacher has fixed). Acknowledging

⁸³ General principles of how physiology and playing technique influences reedmaking (e.g. thick lips can tend to make reeds play flatter) can be included in teacher-produced written reedmaking materials.

⁸⁴ In an interesting variant of this, Linda Strommen gamified project management by giving students a "reed challenge." Any underclassmen that produced ten reeds with all four corners intact by the end of the semester received a small prize.

when students are bold and brave in reedmaking, while also achieving musically excellent results, sets a tone for the studio that opens the doors to Significant Learning.

Evaluation

Asking students to evaluate their own reeds in lessons helps the teacher gauge their skill in Applying Foundational Knowledge. Additionally, giving feedback to students on their reeds on a regular basis helps them see how to continuously improve. Fink suggests that high-quality feedback in any course can be described by the acronym FIDeLity. It is “Frequent, Immediate, Discriminating (based on criteria and standards), and done Lovingly (or, supportively).”⁸⁵ It is easy to see how creating a supportive, discriminating, and regular system of feedback on students’ reeds can help them improve steadily over time.

The teacher may also require students to turn in all or portions of their reed journal for feedback and evaluation. Although there are not documented instances of this in reedmaking pedagogy, it would be potentially valuable to contribute a part of the reed log from each semester to a learning portfolio for oboe, collected over all four years of study.

Since reedmaking is done as a continuous part of the oboe studio curriculum, it may be helpful to remember that Fink’s theory treats all six areas of Significant Learning as equal and integrated, and all should be continuously engaged, as one type of learning often unexpectedly invites another. While this reinforcement of Foundational Knowledge and Application is familiar to teachers of reedmaking, we should embrace similar

⁸⁵ Fink, 106.

opportunities to motivate multiple types of learning through designing activities in all six areas.

Significant Learning Area 3: Integration

According to Fink, integration is “the ability to connect one body of knowledge with other ideas and bodies of knowledge.”⁸⁶ He suggests considering how the content of the course interacts with other courses, ideas, information, and perspectives, and with students’ personal and work lives. For reedmaking, this might mean making connections to other musical crafts (like instrument making and maintenance), other musical fields (music theory, musicology, music education), and other areas of knowledge (other academic fields, or even other hobbies such as crafts or sports).

Learning Activities

First, consider integration with other topics that all music students will also study — musicology and music theory. Using reedmaking as a tool for historically informed performance, for instance, integrates the application of reedmaking principles toward a specific end (historically-informed articulation) with the insights of musicological research. Similarly, the student may use their understanding of music theory to make reeds that can adjust the pitch of thirds and leading tones for expressive or harmonic purposes. Some students may benefit from kinesthetic knowledge commonly applied to music performance, such as body mapping, dexterity, or Alexander Technique, to the physical aspects of reedmaking to avoid injury and improve their fine motor coordination.

⁸⁶ Fink, 83.

Explicit integration of other bodies of knowledge is not common with reedmaking, yet offers the promise of individualized Significant Learning, especially for those in a liberal arts college or comprehensive university setting. For teachers with many students in a major other than performance, developing assignments or projects that integrate reedmaking with the other major may be valuable. For example, music education students could develop their own reedmaking materials, or give a presentation on the basic parts of a reed to high school students. Composition majors could perform repertoire that requires reeds that can perform extended techniques or in extreme registers. Students in other non-music programs of study may find ways to integrate their knowledge of the scientific method, materials science, engineering, biology, physiology, literature, philosophy, art history, and social sciences with reedmaking and performance. The important consideration in the area of integration is that the teacher solicits these connections through individual and group conversations, writing or journaling assignments, or even a specifically planned, large-scale integration project with a colleague in another field.

Performance majors similarly may benefit from encouragement to integrate their liberal arts requirements with reedmaking and performance skills. Doing so can deepen their understanding of both subjects, demonstrate the intellectual rigor of music to peers in other majors, and prepare students for the world beyond college. Perhaps a studio with many students in multiple majors could present a yearly “multi-disciplinary recital,” in which each student prepares a presentation of some sort that integrates reedmaking, oboe performance, and another area of interest. Or imagine an oboe studio “science fair” in

which each student presents a poster on his or her integration of reedmaking and another topic. Other large-scale studio projects may draw on the resources of the institution, like the Butler University bassoon studio, which began a reedmaking business with seed money from a school-wide entrepreneurship competition.⁸⁷

In all these cases, integrative work demonstrates the potential of reedmaking to students, particularly if they are reluctant or skeptical learners.

Evaluation

Asking students to integrate reedmaking with other bodies of knowledge helps to evaluate how well they are achieving Significant Learning in Foundational Knowledge and Application by requiring expansion on these areas. Additionally, cross-disciplinary integration presents an opportunity for oboe teachers to partner with other faculty to develop projects or assignments that benefit students. For example, working with music education faculty to understand their goals for Significant Learning could lead to development of a rich outreach program to local schools. Such partnerships can help the oboe teacher evaluate how well students are achieving Significant Learning across all of their endeavors and leverage study of reedmaking for its greatest impact.

Significant Learning Area 4: Human Dimension

Like mastering musical performance, mastering reedmaking is a lifelong process. Perhaps the most important part of both is taking time to reflect on changes to self-understanding. Fink defines the Human Dimension of Significant Learning as

⁸⁷ “How to Succeed in Business by Making Bassoon Reeds,” *Butler Newsroom*, May 7, 2015, accessed April 16, 2017, <http://news.butler.edu/blog/2015/05/reeds/>.

“discovering how to interact more effectively with oneself and with others.”⁸⁸

Reedmaking in a supportive studio environment teaches students about their tenacity, courage, perseverance, and ability to overcome challenges. Students may also discover their own inclinations when it comes to work, such as length of attention span or tendency to overwork when stressed. They may also discover their own intelligence strengths including spatial, bodily-kinesthetic, and intra-personal intelligences. The reason that teachers should attend to the human dimension of learning are obvious: students not only become better musicians, but they become better colleagues, teachers, and citizens.

Learning Activities

Prompting students to use their oboe journal reflect on their experiences, including personal triumphs and challenges, can help them learn about themselves as a reedmaker and musician. This journaling may well lead to other Significant Learning, including emotional reflection (Caring), identifying personal areas of development and improvement (Learning How to Learn), as well as clarifying Foundational Knowledge and Application concepts.

Teaching reedmaking across several settings helps students grow in the Human Dimension. One-to-one interactions can include reedmaking sessions with the teacher, as well as pairing students as mentors or reed buddies.⁸⁹ Learning how to interact with the teacher as opposed to peers when working through problems can help develop important social and communicative skills. Group reedmaking can be similarly configured in these

⁸⁸ Fink, 83.

⁸⁹ Typical practice of Linda Strommen.

two hierarchies: observing the teacher teach other students in group lessons, or having a group reedmaking space available in which students work together peacefully and professionally. Having upper-level or graduate students teach portions of reedmaking class helps these students develop personal responsibility and sense of efficacy as a reedmaker. The teacher may need to monitor the social elements of peer-to-peer reedmaking settings; it is not uncommon for students to fear revealing their reedmaking inadequacies or insecurities to peers for fear of judgment. Explicitly setting a tone of support, professionalism, and friendship creates a space in which students learn how to treat others with respect and dignity.

Evaluation

Developing students' skills in the Human Dimension may not need to be evaluated as part of the course grade, but presenting them with these multiple types of social configurations enhances the Significant Learning opportunities of reedmaking. Fink does make a distinction between evaluation (formal assessment like grading) and feedback; students need feedback on activities in the Human Dimension to develop skills as colleagues. For instance, a student who demeans or ridicules other students' reedmaking abilities in the reed room needs feedback about how to become a better colleague, or a student may need feedback on their ability to clearly and compassionately critique each others' reeds in group class.

Significant Learning Area 5: Caring

This area of Significant Learning is somewhat straightforward: if a student cares about reedmaking, she or he will get more out of all of the other areas of Significant

Learning. Caring, according to Fink, is “the development of new interests, feelings, and values.”⁹⁰ When students care about reedmaking, they also express caring about the role of music in their lives. Students may learn to value craft and discipline, or they may develop an interest in other parts of the reedmaking process, such as working with gouging machines or selling reeds.

I suggest that teachers consider emotional wellbeing as a part of this area. Reedmaking can be stressful and high-pressure when important auditions, recitals, or other important performances are approaching. Despite our best efforts and planning, the weather changes, equipment breaks, or the cane is simply not cooperative, and we must pull through.

Learning Activities

If the student is invested in playing the oboe, the previous Significant Learning areas should help them also become emotionally invested in reedmaking. However, college is a time of self-discovery and maturing, and sometimes students grapple with what the role of music in their adult lives will be. Learner-centric curriculums require that teachers aim to foster a love of the subject in the student, but that they also honor the student’s background experience and personal goals. Reflection through journaling is one of the best ways for students to assess their values and feelings surrounding reedmaking, and for the teacher to discern a student’s life goals.

Teachers may also provide resources in self-care to balance the stresses of reedmaking. Some students are stressed by the simple act of sitting at the reed desk, or by

⁹⁰ Fink, 83.

finishing a reed fully as important performances approach. Mindfulness practice can take away the immediate stress that clouds judgment when the reed knife is in hand.⁹¹

Physical self-care such as exercise, yoga, physical therapy, and general body awareness help assuage stress, with the added benefit of strengthening muscles and increasing lung capacity to improve oboe playing overall. In this way, Caring is linked to Foundational Knowledge, Application, Integration, and the Human Dimension.

Evaluation

In her studio at Indiana University, Linda Strommen uses a valuable tool twice per year to check in with students as complete, complex people — a survey that asks about their self-perception of their musical and nonmusical lives. Students share as much as they feel comfortable. She reviews each student’s survey and meets with them to talk about how school and life are going. For students negotiating the future role of music in their lives, this offers space to talk through options and get advice from a teacher whose students have become professionals in many walks of life. She also asks them directly what is working and not working for them in the studio, soliciting explicit feedback about how she has designed their learning experience. This not only provides invaluable insight into how to design learner-centric experiences, but also demonstrates caring, encouraging the student to care about the studio in return.⁹²

⁹¹ Jessica Warren, “Mindfulness Practice in Oboe Reedmaking: Awakening Artistry,” Poster, Annual Conference of the Association for the Contemplative Mind in Higher Education, Amherst, MA, 2016.

⁹² Linda Strommen, personal communication, 2014.

Significant Learning Area 6: Learning How to Learn

Fink asks teachers to consider how students will learn to construct knowledge and become self-directed learners. He defines Learning How to Learn as “developing the knowledge, skills, and strategies for continuing one’s learning after the course is over.”⁹³ A reedmaker who has learned how to learn can solve new problems without the aid of a teacher and is able to incorporate new knowledge into existing frameworks. When students have ownership over their reedmaking craft, that is, when they are self-regulated, they can explain the concepts to themselves, reflect on the cognitive processes that brought them to understanding, and subsequently apply insights about their own self-regulation and the nature of learning to other areas.

Learning Activities

The ability to continue learning after the reedmaking guidance of the undergraduate experience has ended can be aided in part by making students aware of resources such as the website and journal of the International Double Reed Society, well-written reed making websites and blogs, and available reedmaking manuals. Journaling the experience of trying to teach oneself a new skill or solve a new problem can provide insights on the learning process itself. By noticing what worked or did not work in how a reedmaking problem was addressed, the student can regroup and try again, hopefully to better results each time.⁹⁴ Learning How to Learn may also include exploring how to

⁹³ Fink, 83.

⁹⁴ Linda Strommen asks students to take pause when they realize a gap in their skills or understanding to identify what they need to improve. Do they need information or a new concept? Do they need resources, such as money, equipment, or space? Or perhaps they need time to work on building a new skill that is still fledgling. This

learn Foundational Knowledge in other subject areas. Memorizing measurements for reeds, diagramming the reedmaking process for themselves, or even making mnemonic devices may help the student better understand their preferred way of learning and teaching themselves new material, regardless of subject. Journaling or logging is a valuable learning tool for keeping track of complex problems of any sort.

Learning How to Learn is also informed by the concept of academic self-regulation, as characterized by Barry Zimmerman as students' ability to a) purposively using "specific processes, strategies, or responses" to improve academic achievement and b) monitor the effectiveness of these learning strategies and respond to this feedback through changes in self-perception or behavior.⁹⁵ In her dissertation about self-efficacy beliefs among high-school All-State orchestra students, Karin Hendricks found that a student's ability to positively recall past enactive mastery experiences (experiences that concretely demonstrated mastery of a skill, such as past successful auditions), draw on the verbal support of mentors and peers, and frame skills in which other students were more advanced as a source of inspiration rather than shame — that is, the ability of the student to effectively self-regulate in the face of competition and musical challenges — lead to higher self-efficacy beliefs and musical outcomes.⁹⁶

Hendricks' research suggests that teachers of reedmaking can foster positive self-

suggests a self-regulatory approach.

⁹⁵ Barry J. Zimmerman, "Models of Self-Regulated Learning," in *Self-Regulated Learning and Academic Achievement: Theory, Research, and Practice*, ed. Barry J. Zimmerman and Dale H. Schunk, 1–26 (New York: Springer-Verlag, 1989), 4.

⁹⁶ Karin S. Hendricks, "Relationships Between the Sources of Self-Efficacy and Changes in Competence Perceptions of Music Students During an All-State Orchestra Event," (PhD Diss., University of Illinois at Urbana-Champaign, 2009), 271–83.

regulation in their students by encouraging them to celebrate mastery of skills, to consciously limit the power of negative reedmaking experiences (including performances that were negatively affected by the reed), and to believe in their capacity to effect change in their abilities. This can be achieved when the teacher offers positive verbal feedback, fosters a collegial peer environment, and encourages students to reflect on their own self-regulation during the reedmaking process and over time. Just as oboists regulate their technical choices when making a reed (where to scrape, desired tone quality, etc.), students can self-regulate their mental processes during learning reedmaking, by choosing the mental tools by which they are encouraging themselves toward future reedmaking success.⁹⁷

Evaluation

Avoiding providing students too much help on reeds, especially as they become more experienced, enables them to coach themselves through problems. Many oboe teachers know the difficulty of deciding the point at which to transition a student from primarily playing on reeds others have made to reeds the student made themselves — students may encounter a dip in their overall playing ability when this transition occurs. But, like taking training wheels off of a bike, students must learn to coach themselves and make reeds on their own. By framing the experience as a way to learn how to learn, the student may be able to reflect on the challenging aspects of the experience and emerge feeling more confident and with new learning tools that can be applied in other areas of life.

⁹⁷ Karin S. Hendricks, personal communication, April 2017.

Putting It Together: Rich Learning Activities

Rich learning activities achieve multiple learning goals or types of Significant Learning at once.⁹⁸ Just as well-designed Significant Learning goals tend to reinforce multiple aspects of Significant Learning at once, well-designed use of teaching tools and institutional resources can efficiently achieve multiple goals simultaneously.

Reedmaking is itself a rich learning activity — it requires students to recall, apply, and integrate knowledge even in the ways it has been traditionally taught. Students that are motivated to play the oboe well typically do not struggle with Caring, and when the teacher also considers the areas of Human Dimension and Learning How to Learn, the daily process of making reeds becomes a powerful learning experience.

Example activities such as reed classes, reed buddies, and the reedmaking “science fair” all explore possible iterations of rich learning activities in the oboe studio. But I believe the best tool that provides rich experiences across all learning areas is the reed log or reed journal. It helps students recall Foundational Knowledge, experiment with its Application, reflect on or work through problems in Integration, Caring, the Human Dimension, and Learning How to Learn. Fink summarizes the capacity of reflective exercises, like journaling, to enhance learning experiences:

People are meaning-making beings. We make meaning based on our experiences and on the information and ideas we encounter. However, this is where a potential problem crops up. Whenever someone has a new experience, or encounters a new idea, those events automatically have an initial meaning. But this initial meaning may remain buried at the unconscious or subconscious level. When this happens, the meaning may be limited, distorted, or even destructive.⁹⁹

⁹⁸ Fink, 123.

⁹⁹ Fink, 117.

A common example from the oboe studio illustrates this point. Many students go through a phase in which they believe that they “can’t make reeds.” Being overwhelmed with too much new, complex information when first learning reedmaking, or encountering a bad reed that impacted a public performance, can lead the student toward destructive stories about their own efficacy as a reedmaker and musician. If the basis for their negative belief is not brought to the surface and examined, it can be so destructive that the student might eventually quit the oboe. Using the rich learning activity of journaling can help students make meaning of these and other musical experiences, evaluate them, and hopefully contextualize them in a positive light that celebrates their other musical gifts and accomplishments.

Another possible rich learning activity that may help students is the use of a learning portfolio, which has been applied in many other higher education settings but less so in music performance. Fink notes that learning portfolios emphasize three of the Significant Learning areas — Human Dimension, Caring, and Learning How to Learn — with reflection (an active learning activity) and self-assessment. He describes their power:

The central idea of learning portfolios is for students to reflect on a selected learning experience — which may be a single course, all the courses in their major, or their whole college experience. Then, at the end of the course or program, students put together a document that describes and illustrates the meaning of the whole learning experience. Generally the portfolio consist of two parts: a narrative statement and an appendix with various kinds of material that illustrate and support the comments in the narrative . . . The final product also encourages students to communicate with others what they have learned and, when appropriate, can become a tool that can be used for self-assessment and institutional assessment.¹⁰⁰

¹⁰⁰ Fink, 131–2.

Using a learning portfolio in the oboe studio can help students recognize the work they have done, and assess how they have reached Significant Learning goals in reedmaking and oboe playing over the course of a four-year undergraduate program. Collecting journal entries, more formal writing projects, lesson notes, annotated repertoire, recordings, and even sample reeds demonstrates growth over time. Reviewing this portfolio each semester or each year as it being constructed helps the student reflect on their growing professionalism as a musician, and collects their work into a cohesive whole that helps the teacher assess progress in learning goals. For students that will pursue careers outside of oboe performance, the portfolio provides insight into their learning and work styles, instills confidence in their ability to improve, and may even suggest concrete applications of their musical training to other fields.¹⁰¹

Integrate

The final step in Fink's initial phase of course design is to review the situational factors, learning goals, learning activities, and feedback and assessment procedures that form the basic structure of the course and evaluate how well they are integrated. How do all of these inputs work together? Is the load of reedmaking activities realistic within the context of the overall oboe studio and music school obligations of the students? Do the goals and activities serve all the students in the studio, or only some? Some integration may need to be done on a student-by-student basis, with the philosophy that all students have the capacity to grow as musicians through reedmaking.

¹⁰¹ More information about learning portfolios can be found in John Zubizarreta, *The Learning Portfolio: Reflective Practice for Improving Student Learning*, 2nd ed. (San Francisco: Jossey-Bass, 2009).

Fink's Intermediate Phase: Assemble the Components into a Coherent Whole

The intermediate phase includes creating a thematic structure for the course, creating a teaching strategy, and ensuring that these are integrated into an overall scheme of learning activities.

Thematic Structure

In Fink's conception, the thematic structure is a sequence of three to seven main topics from the subject that are related to the Foundational Knowledge and learning goals of the course. Once these topics have been identified, a teaching sequence is chosen for them, which may be progressive in some way.¹⁰² Topics that may be considered for a yearlong reedmaking curriculum include:¹⁰³

- Choosing Cane
- Shaping and Tying Cane
- Knife Sharpening
- Scraping the Reed
- Making an In Tune Reed
- Finishing the Reed: Evaluating for Function
- Problem Solving: What's Wrong with my Reed?

¹⁰² Fink, 143.

¹⁰³ Again, Fink's course design model is for a one-semester course, and it is therefore somewhat artificial for reedmaking instruction that would extend throughout the undergraduate degree. However, because these topics are foundational, the teacher is able to keep coming back to them when students have more advanced stages of knowledge and skill, and they will have the capacity to repeatedly lead to Significant Learning.

Teaching Strategy

Designing a teaching strategy involves arranging the learning activities determined in Fink's first phase into the thematic structure, and then onto a timeline of teaching interactions. In the case of the oboe studio, conceiving of this timeline as both a yearly and a degree-long plan can help ensure that students are learning about reedmaking in a deep and significant way. This is not to say that every interaction with a student over four years should be planned in advance, but keeping an eye to long-term learning and the structure of the student's education can help make the structure of each semester's reedmaking work more meaningful.

In order to design a teaching strategy, understanding the flow of the academic year for both the music school at large and for each student's degree and year in school can help ensure that the curriculum is learner-centric, leveraging built-in projects or milestones of performance study to reedmaking growth. At an institutional level, each year may follow a progression like this:

FALL SEMESTER	Ensemble auditions	Lessons	Ensemble and chamber music obligations	Jury Exam (feedback)
SPRING SEMESTER	Lessons	Ensemble and chamber music obligations	Summer festival auditions	Recital or Jury (feedback)

Figure 5.2. Sample Semester Chronology

A four-year plan in performance may look like this:

Year 1 and 2	Building basics, building repertoire, progressively better ensemble assignments, possible Upper Divisional Exam
Year 3	Further improvement of playing skills, Half recital
Year 4	Graduate school auditions, Full recital

Figure 5.3. Sample Four-Year Chronology

Students in music education will have student teaching as a major part of their degree program; those in composition or other fields may have senior thesis projects or be involved in a job search.

A final consideration may be the musical tradition of teaching repertoire and technical skills progressively in the lessons, remembering the inherent integration of building playing skills and reedmaking skills:

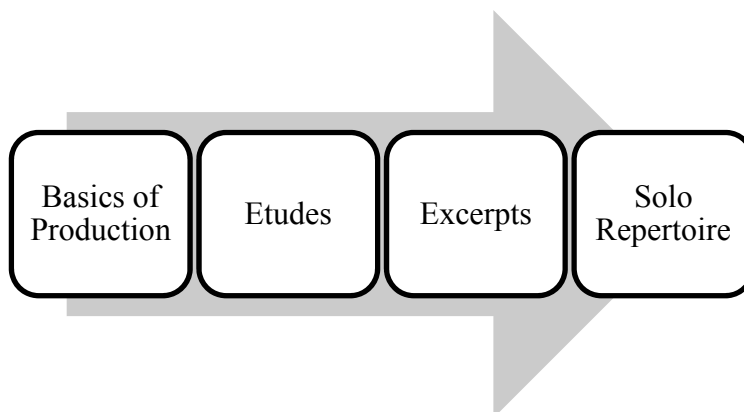


Figure 5.4. Progressive Repertoire Framework

The challenges of each of these repertoire types areas have attendant reedmaking skills, and perhaps suggest a similar curricular framework for reedmaking.

The teaching strategy for reedmaking may take any or all of these situational factors and traditions into account in order to arrange learning activities into timeline that is integrated with other aspects of the student's musical study. It is not uncommon for teachers of reedmaking to use the same general teaching strategy from year to year, modifying elements of it for individual students as they progress through the program. For example, each year, students that are new to the oboe studio will need to be taught the basics of reedmaking and its application. If the student is exposed each year to the same basic material, they may reap new benefits and further refine their skills. It is, in fact, in many oboe studios common for all students attend some classes in reedmaking basics. An example of a teaching strategy might be as follows:¹⁰⁴

- Full studio reed class once per month
- Small group reed class every other week
- Individual feedback on reeds in lessons each week
- First- and second-year students assigned an upperclassman as a reed buddy
- All students make reedmaking reflections in a journal after any or all of these reedmaking lessons
- Each student makes three to five new reeds per week

In the fall, the basics of reedmaking are demonstrated in the first few scheduled masterclasses, with lecturing, handouts, and demonstration by the teacher. Students then work in small groups with the teacher in following classes on the basics of tying,

¹⁰⁴ Similar to many of the practices of Linda Strommen's studio at Indiana University.

scraping, etc. Special topics in problem solving, such as how to make reeds in the winter, or how to fix a gouging machine, may be added into full studio reed class sessions as needed to address learning goals of the students at any given time. Students write a reedmaking reflection at the beginning of each semester, and revisit it mid-semester with end-of-semester performances in sight, and finally, reflect again at the end of the semester. Annually students conduct an integrative project related to oboe reedmaking.

In this teaching strategy, students are given frequent feedback and learn in multiple group configurations (Human Dimension). They gain Foundational Knowledge through lectures and small group lessons, and Apply that knowledge in the reeds they make each week. They Integrate reedmaking knowledge in their performance lessons and through special workshops and assignments. Working toward institutional milestones or outside performance goals integrates reedmaking with overall musical study and encourages them to Care about the reedmaking craft as an integral part of musicianship. Guided reflection throughout the semester helps them Learn How to Learn.

Fink's Final Phase: Finish Important Remaining Tasks

This final phase includes creating the grading system, codifying the course in a syllabus, and reflecting on larger-scale goals of course design.

Grading

As with all other elements of his course design process, Fink recommends that the grading system reflect Significant Learning goals, in that it is “fair and educationally

valid.”¹⁰⁵ Grading systems that best achieve this tend to have variety in the graded items and reflect the importance of learning activities by weighing them accordingly.

In settings where reedmaking is a part of the overall oboe lessons and/or masterclass credit, it may or may not figure explicitly into the overall grade for the course. It is most commonly scored within a general “preparedness” metric for lessons or an attendance/participation grade for masterclasses. However, if the teacher plans to use other teaching tools for reedmaking, such as reed logs or journals or culminating projects, these activities should figure into the grading scheme of the course in a way that communicates their importance to students.

Grading the quality of the reeds students produce is more questionable. All oboists are aware of the difficulties of making reeds consistently, and it is not uncommon for students to experience periods of highs and lows in their reedmaking as they learn which materials work for them and how to control reedmaking variables. The use of an objective rubric, for instance, has the potential to help teachers and students gauge progress towards making professional quality reeds, but could be demoralizing as a justification of grading. Perhaps a better solution would be to encourage students to set a learning goal for reedmaking each semester with guidance from the teacher (e.g., “improve my knife sharpening” or “consistently tie good blanks”), and base a portion of their grade on progress toward these individualized, attainable goals.¹⁰⁶ Using a weekly

¹⁰⁵ Fink, 157.

¹⁰⁶ Fink, 162. “An analogy that may be useful here is the relationship between a coach and a sports team. In any sport, any and all points scored will be scored by the players, not by the coach. The coach is responsible for having a game plan. However, for this game plan to be implemented, it must first of all be understood by the whole team.

quota of reeds as part of the grade can ensure that students are making reeds regularly, and can help the teacher monitor the student's progress over time.¹⁰⁷ Teachers may want to differentiate grading for upperclass students. Those who will be student teaching or completing other time-consuming coursework may need lower reed quotas; those who will be doing graduate school auditions in performance will need more ambitious semester goals.

Teachers may also consider developing teaching activities that are suited to what Fink calls Forward Looking Assessment:

Teachers using backward-looking assessment look back on what has been covered during the last four weeks, for example, and in essence say to the students, “We have covered topics *x*, *y*, and *z*. Did you get it?” In forward-looking assessment, teachers look ahead to what they expect or want students to be able to *do* in the future as the result of having learned about *x*, *y*, and *z*.

The curriculum of a typical music education has various opportunities to put reedmaking study in to practice (recitals, orchestra performance, etc.). Perhaps other student-designed rich learning activities, such as developing their own education outreach, therapy, or service projects could also serve to contextualize the reedmaking skill in a new way. Using self-assessment, and perhaps also peer assessment, in addition to the teacher's assessment throughout the project shares power with the student and provides the student real-life feedback about the choices they made — in the preparation of the performance, from concept, through reedmaking, to making music and connecting with their audience.

But even a good game plan may need to be modified from time to time, based on the ongoing dialogue between the coach and the team.”

¹⁰⁷ Rennick, “Oboe Reed-making Pedagogy,” 62–63. Forty-seven percent of reedmaking teachers require weekly reed quotas.

Syllabus

The syllabus for reedmaking might be a portion of the overall applied lessons syllabus or designed as a ‘class’ that constitutes a portion of the lessons grade. Obviously, in instances where reedmaking is offered for credit, the course will have its own syllabus, and may require additional learning activities that reflect the amount of credits offered. It is important that course goals are communicated to students through the syllabus, as well as logistical information, structure and schedule of reedmaking activities, grading procedure, and course policies (including attendance, required materials, etc.). The syllabus should exemplify the principles of Significant Learning, and make the learning process for reedmaking explicit and real to the student.

Using a Unifying Theme or Diagram

Fink suggests, “Finding or developing some mechanism, whether it is a question, theme, or a graphic, will allow you to greatly assist students in making the necessary connections among the goals, teaching and learning activities, feedback and assessment.”¹⁰⁸ These tools can be used to explain a concept of Foundational Knowledge, Integration of course themes, or other organizing principle that will communicate something essential about the course philosophy to students.

There are no shortage of reed diagrams, tables, and charts produced by oboe teachers for teaching the Foundational Knowledge of reedmaking and its Application. I have advocated in this project for the development of a broader literature of reedmaking pedagogy, which is related to other performance pedagogy but may require a separate

¹⁰⁸ Fink, 164.

toolbox of Significant Learning goals and teaching strategies. Figure 5.5 is a representation of a curricular diagram for an oboe studio that reflects this conception, and could be shared with students as a guide for their own development over a four-year oboe curriculum.

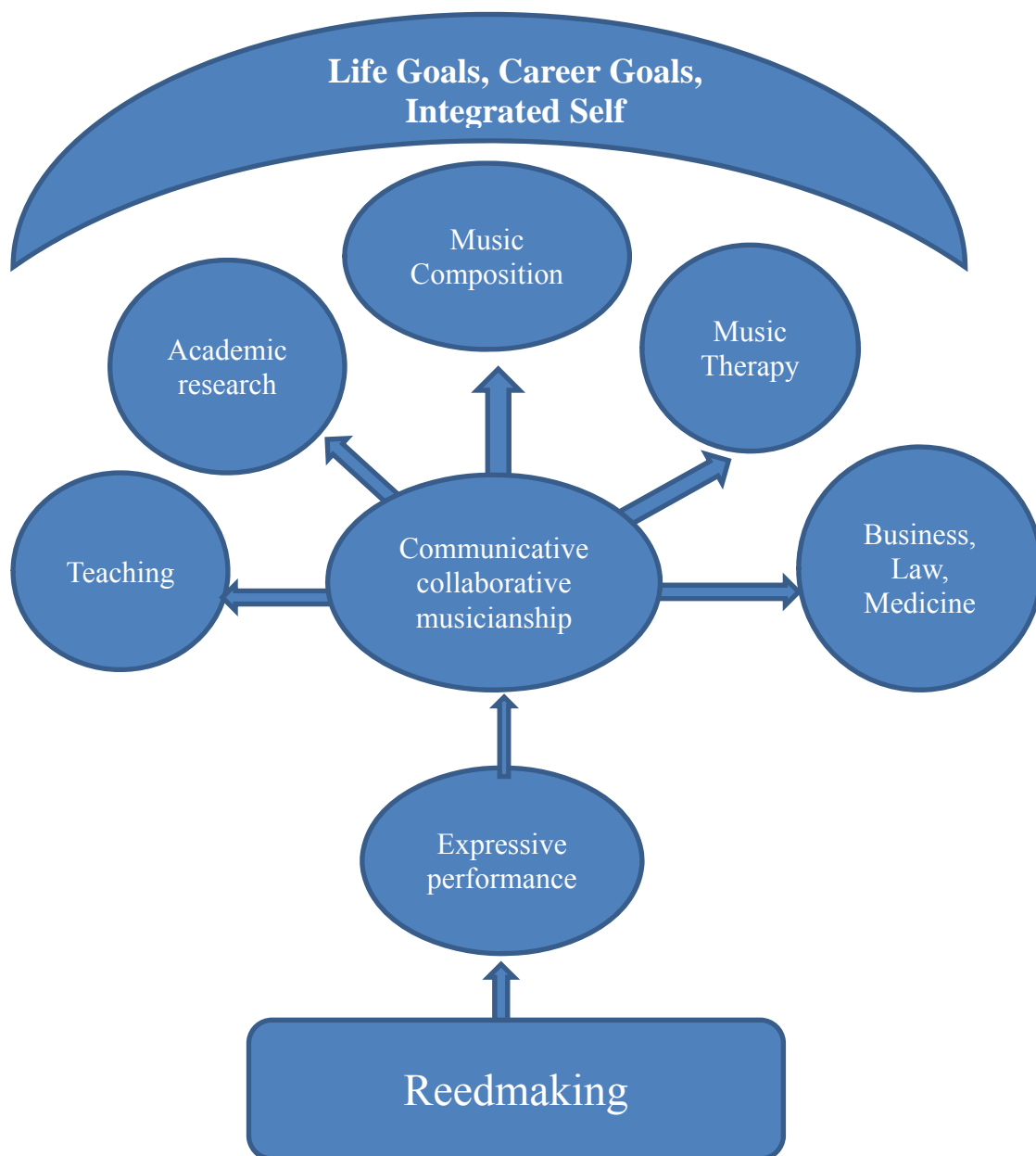


Figure 5.5. Significant Learning Framework for Whole Student

This diagram reflects the underlying philosophy of Significant Learning — to enable students to see “the powerful link between high-quality living and high-quality learning.”¹⁰⁹ Reedmaking is the foundational nexus through which students achieve expressive performance, connect this to communicative and collaborative musicianship, and finally, apply skills learned through all three previous steps to their life goals, career goals (various, as reflected in example outcomes), and a sense of overall wellbeing and integrated self.

Other Considerations: Student Resistance, Power Sharing, and Evaluating Teaching

Fink shares that it is common for students to resist new ways of structuring courses or new learning activities. One can imagine that students who have experience with reedmaking but have never heard of reedmaking “projects” of any sort might be skeptical of their value. When the teacher shares a vision for the student’s learning and engages the student in these types of learning activities from the beginning of the course, it can help ease resistance.¹¹⁰ Just as working collaboratively with students to develop individual reed goals has the capacity to inspire reedmaking progress, sharing power with students about how the class is conducted, such as soliciting feedback on what special topics to cover or what class meeting arrangements are working best as the semester progresses, keeps the course responsive and learner-centric.¹¹¹ Using anonymous questionnaires or meeting with students for feedback can give teachers important feedback about the efficacy of specific teaching strategies and the success of the

¹⁰⁹ Ibid, 290.

¹¹⁰ Ibid, 161–2.

¹¹¹ Ibid.

reedmaking curriculum overall. Asking for evaluation by an outside observer (perhaps a visiting oboe colleague) can help further illuminate the success of reedmaking classes.¹¹²

Reflecting on Implications of Course Design

While the focus of this project has been on the application of Significant Learning principles to reedmaking pedagogy, reedmaking is only one part of the puzzle of an oboe studio. In explicitly discussing common situational factors that affect teaching reedmaking, I hope to initiate a broader discussion about reedmaking pedagogy, to explore what the unique character of this subject presents in terms of challenges and opportunities, to delve into conversation about reedmaking pedagogy beyond the nuts-and-bolts handbooks published today. Similar questions of Significant Learning can be extrapolated to the curriculum of the performance studio as a whole, and will be discussed briefly in the following chapter.

¹¹² Ibid.

CHAPTER FIVE: SUMMARY AND IMPLICATIONS FOR PRACTICE

Summary

A pedagogy of oboe reedmaking pedagogy certainly exists, but it has been passed down mainly through oral tradition and has not been well documented. Using Fink's theory of Significant Learning, oboe teachers can reflect on the reedmaking teaching practices they have received from their own teachers, and assess the strengths and weaknesses of those practices for serving contemporary college students. Students in any college major are affected by dual instructional impulses — both toward specialization and toward generalist knowledge and skills, such as creative thinking and collaborative problem solving, that are necessary for twenty-first century employment. A well-designed oboe reedmaking curriculum achieves both aims — the acquisition of a specialized professional skill and leverage of its Significant Learning potential toward knowledge and skills that can be used in many areas of life — for the variety of life and career goals that exist among the oboe students in any given studio.

Through Significant Learning, students' understanding of reedmaking can be deepened, and brought to interact with their broader musical and liberal education in meaningful ways. Using Significant Learning principles as the basis for a reedmaking pedagogy leads to expressive musicianship, communicative and collaborative performance, and the finally to the application of its principles to a vision of oneself as an integrated musician, citizen, and person with skills and knowledge to share.

Implications for Practice

This project has conceptualized Significant Learning in reedmaking as only one aspect of an oboe studio curriculum that would reflect similar principles at all levels of teaching and learning. In the case of other instrumental studios, reedmaking could be replaced with other idiosyncratic practices of that instrument. There are, no doubt, many aspects of Significant Learning that are relevant to any performance studio.

Using Fink's course design process to integrate repertoire or technical performance skills with Significant Learning goals has the potential to invite lasting musical and personal change in our students. All performance teachers would be well served by considering the situational factors of their studio teaching in detail, in pursuit of a vibrant and responsive studio environment. All instruments, including voice, have inherited pedagogical practices that may not be well documented. Use of Fink's tools can help faculty interrogate and evaluate these traditions, and supplement them with research-informed practice where necessary. Some pedagogical traditions may not need to change at all — music pedagogy, in general, emphasizes active learning and is highly individualized. Furthermore, skills like project management are required for other aspects of performance, such as recital preparation or chamber music performance. Many of the tools suggested in this project are easily adapted to other performance study, including the use of journaling, team-based learning, and learning portfolios. To leave our scholarship of teaching and learning in music undocumented invites a view of music as less rigorous or as “decoration” in comparison to other fields in the academy. This is surely a view that performance teachers would not intentionally promote.

Although they do not explicitly use Fink's theory as a guiding principle, various musical educational institutions have developed programs in recent that could be seen as offering Significant Learning opportunities for their students. Chicago Civic Orchestra's Fellowships, New World Symphony's Fellow Initiatives, the Eastman School of Music Arts Entrepreneurship Certificate, and the requirement of coursework in an "Outside Area" for Master of Music degrees at Indiana University are all examples of institutional support for students' work as "citizen musicians." If students are only taught to play their instruments and are not given opportunities to practice constructing meaning, make intercultural connections, or explain the value of their creative processes to others outside of the field, then the value of our work is limited. We as performance teachers should strive to help shape these experiences at the institutional level.

Conclusion

Imagining a scholarship of reedmaking pedagogy must start, as Susan Wharton Conkling suggests, with "systematically observing and questioning contemporary curriculum and pedagogy and building new practices in light of collected evidence."¹¹³ Some reedmaking traditions have been codified as instructions for the craft of making reeds in published literature, but we have yet to systematically collect and reflect upon those pedagogical techniques developed by teachers in specific oboe studio settings.

Collecting some of these techniques and scrutinizing them through the lens of Fink's theories names the practices we have already successfully employed as studio teachers and teachers of reedmaking. Envisioning an expansion of these teaching

¹¹³ Conkling, "Envisioning a Scholarship," 64.

activities to include research-informed techniques, such as curricular design, learning portfolios, or team-based teaching, has the potential more deeply engage all of our oboe students. When we as oboe teachers can communicate our pedagogy in scholarly terms, we derive the additional benefit of sharing teaching insights from the seemingly narrow and esoteric field of reedmaking, not only with other music educators, but also with other educators across the academy. We can then learn from those who face similar situational or content-based pedagogical challenges.

There is certainly more work that may be done in the application of scholarship of teaching and learning in higher education to the field of reedmaking, and to performance pedagogy more broadly. Cross-disciplinary research that engages fields with similar pedagogical topics could be of great benefit, such as visual art (teaching visual sensitivity and acuity, teaching physical creativity, adaptation of craft to academia), engineering (exploring materials science, teaching 3D thinking and problem-solving), acoustics, or any myriad of other academic specializations.

In sum, to reconceptualize reedmaking pedagogy is to see it not only in service of the music, but also in service of the students. Furthermore, reedmaking pedagogy should serve all students in the oboe studio, irrespective of their life and career goals. We should not be content to teach students to make reeds simply to play the oboe; the artful complexity of reedmaking has much to offer all oboists in learning how to grow, as people and as musicians, for a lifetime.

APPENDIX: JOURNALING

Journaling is a rich learning activity that can enhance students' engagement with reedmaking and performance alike. Reedmaking journals may be a combination of reed log, note-taking, and reflective writing on the reedmaking process, or whatever other representative product assists the student in working through the reedmaking process.

Jennifer A. Moon's *Handbook of Reflective and Experiential Learning: Theory and Practice* includes a resource for students about reflective writing, which describes the process:

Reflection lies somewhere involved with the notion of learning and thinking. We reflect in order to learn something, or we learn as a result of reflecting. Reflective writing is the expression on paper/the screen of some of the mental processes of reflection . . . you will learn not only from the 'in the head' reflection but from the process of representing the reflection itself. Also, you will learn different things according to the manner in which you represent your reflection. For example, drawing a picture to represent reflections will differ from what you will learn in writing about the same content. It is a part of the process of writing reflectively to be as aware as possible of the influences that are shaping the writing you actually do.¹¹⁴

Below is a set of prompts about reedmaking that may be shared with students to inspire their journaling work:

- Reed Log:
 - Date reed was made
 - Measurements of the cane — center, ears, and thread
 - Cane source
 - Shaper tip used

¹¹⁴ Jennifer A. Moon, *A Handbook of Reflective and Experiential Learning: Theory and Practice* (London: RoutledgeFalmer, 2004), 186–7.

- Tie Length
- Soaking time
- Scraping dimensions — where did you start the tip, heart and back?
- Experiential Questions:
 - At what point in the reedmaking process do I feel confident? Stressed? Bored?
 - When I feel frustrated about reedmaking, are there any surrounding factors that contribute to this feeling? (e.g. time constraints, lack of materials needed, etc.) Can I do anything to control these factors?
 - What is my reedmaking routine? How well is it serving me today?
 - When I am confused about reedmaking, how do I react? What can I do to clear up these confusing areas?
 - Narrate and record your adjustment of a reed. Did the fixes you attempted help, hurt, or keep the reed the same? Did this reveal anything about your reedmaking overall?
 - When I work with others on reedmaking, what helpful insights do they have? How does their reedmaking differ from mine?
- Reed Function Questions
 - Think back on your favorite reed you've played recently. What qualities did this reed possess that you would like to recreate?

- Are my reeds adaptable to many types of repertoire and ensemble settings? If not, what might I need to change (for orchestra performances vs. solo, etc.)?
- How well do my reeds allow me to play with artistry and musical integrity? Do they approach the standard of musicianship I would like to attain?
- Draw a picture of your ideal reed. Compare this diagram with others in your studio. What aspects of the reedmaking process did each of you emphasize?

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