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OBOE REED-MAKING PEDAGOGY IN THE UNITED STATES: A SURVEY

by

Elizabeth Ann Young Rennick

An essay submitted in partial fulfillment
of the requirements for the Doctor of Musical Arts degree
in the Graduate College of
The University of Iowa

May 2010

Essay Supervisor: Associate Professor Benjamin Coelho

Graduate College
The University of Iowa
Iowa City, Iowa

CERTIFICATE OF APPROVAL

D. M. A. ESSAY

This is to certify that the D.M.A. essay of

Elizabeth Ann Young Rennick

has been approved by the Examining Committee
for the essay requirement for the Doctor of Musical Arts
degree at the May 2010 graduation.

Essay Committee: _____
Benjamin Coelho, Essay Supervisor

_____
William LaRue Jones

_____
Maurita Murphy Mead

_____
Kenneth Tse

_____
John Peters

ACKNOWLEDGMENTS

This project would not have been possible without the wisdom, guidance, and encouragement of Professor Mark Weiger. It was my great fortune to work closely with him in conceptualizing and implementing the survey, and his untimely death was a loss to this work and the oboe world. He is greatly missed.

In addition to being an oboist of the highest caliber, Mark was an innovative reed-maker. The quality of his analytical mind coupled with his outstanding concept of sound, led to many stimulating and influential conversations about every aspect of the construction of reeds. To separate his thoughts from my own approach would now be impossible.

A special thanks is also due to Professor Benjamin Coelho, who has been exceedingly generous in every way with his energy and support at a time when it was very much needed. His advice has been invaluable.

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INTRODUCTION

This essay explores current methods, procedures and philosophies surrounding oboe reed-making via a survey conducted in 2009 amongst college-level oboe professors. By relying on the results of the survey, it seeks to identify a unifying approach to American reed-making pedagogy by establishing common concerns and experiences of educators and presenting a snapshot of the development of oboe reed design in American universities and colleges with particular attention given to developments during the tenure of those surveyed ending with 2009. Email invites numbering 273 were issued to members of the oboe community with 115 responses, a remarkable response rate of forty-two percent.

The oboe reed is a critical component of tone production for all oboe players, and as such, its importance to both the oboe student and the oboe teacher is paramount. Many attempts have been made to mass manufacture oboe reeds using various machines, but a personal handmade reed is both the preference and standard for professional oboists and their students.

This essay attempts to quantify the practice and philosophies of reed-making teachers. Though reed-making manuals are widespread, reed-making instruction has followed a largely oral tradition throughout the history of the instrument, and this oral tradition often presents itself as more art than science. The art is guided by tradition while finding itself presented with innovations at an ever-increasing rate. The basic concept of the oboe reed has changed little in the years since its conception, but the methods of construction have greatly evolved. Players now find themselves with access to tools manufactured with unprecedented consistency. The results of this survey indicate

that there is still a great deal of variety in both oboe reed construction and pedagogy amongst oboe professors, suggesting that there is not just one right way to make a reed.

Background

A significant influence on the conception of this project was *Oboe Performance Practices and Teaching in the United States and Canada*, a survey-based research project by Dr. James Prodan.[1] Published by The Institute for Woodwind Research in 1979, Prodan patterned his project after *Clarinet Performance Practices and Teaching in the United States and Canada*. Previous to this publication saxophone and bassoon versions were published.

Prodan's survey inquired about various aspects of oboe teaching including items ranging from repertory to reed-making. The survey was mailed in the spring of 1977. Prodan did not attempt to interpret the submissions, but simply reported the results. He asked his questions in an open-ended format that made tabulating and comparing results to a later survey impractical. Despite this limitation, Prodan's research is of immense interest in assessing the state of oboe teaching at the time it was produced.

An additional influence was the publication of David Ledet's *Oboe Reed Styles*, which enjoyed its first printing in 1981.[2] This work has had great distribution through several editions including a recent reissue for the first time in paperback. It discusses various aspects of tone production, a brief historical background of the oboe, and

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

[2] David A. Ledet, *Oboe Reed Styles: Theory and Practice,* (Bloomington: Indiana University Press, 1981).

accepted styles of playing. The second section of the book is of particular interest to this study, wherein Ledet presents pictures of seventy-nine reeds from oboe performers around the world. Included in his work are photographs of well-known oboists' reeds with a brief biography of each oboist and a discussion of his or her individual reed style. He also examines the differences among French, American, English, German, Dutch, and Viennese reed-making styles. This work was the first of its kind, demonstrating the many distinct styles of oboe reeds used by prominent oboists of the late seventies. Nearly all of the surveyed oboists are now retired or deceased. His research provides a valuable historical resource and a second forerunner of this survey project.

Project Description

In this project oboe professors teaching at universities and colleges in the United States answered questions about the way that they make and teach reed-making. Participants were invited to complete an online survey that addressed their current methods and philosophies as a reed-making teacher. Those that were surveyed were asked to include both their name and their professional biographical information for possible inclusion in this essay. A sample of the survey and the results can be found in the appendices, which contain lists of the participating institutions and individuals. Results of the survey were tabulated and this summary essay composed.

Limitations

The target survey population was oboe instructors at significant teaching institutions in the United States. Survey participants were limited to oboe instructors working at colleges and universities meeting the following requirements:

- Institutions that are included in the *CMS Directory of Music Faculties of Colleges and Universities, U.S. and Canada* (2006- 2007).
- The initial respondents were contacted through an email address available on their respective institution's web page.

One of the following additional criteria must also be met:

- The respondent must have been employed full-time at a four-year degree granting institution.
- The respondent's institution must have a Graduate music program.

The project did not consider English horn or period instrument reeds.

Significance

The making of the oboe reed is arguably the single most important factor in tone production for the oboist. As such, its importance to the scholarly oboe world is indisputable. Literature reviewing and comparing current reed-making practice over a large surveyed group is out of date. This research shows trends in oboe reed-making and teaching in the United States in 2009.

Procedures and Methodology

A survey with seventy-four questions covering various topics concerned with oboe reed-making pedagogy was developed. The Zoomerang online survey platform[3] was used to design and deploy the survey, and the first survey request was sent at the end of the spring semester in 2009 via an email invitation. A second and third reminder followed this request. The reminders were sent to only those who had not completed the survey through the Zoomerang system. The survey closed in August of 2009.

[3] Zoomerang is an online survey tool. It was one of the first online survey software tools developed, emerging in 1997.

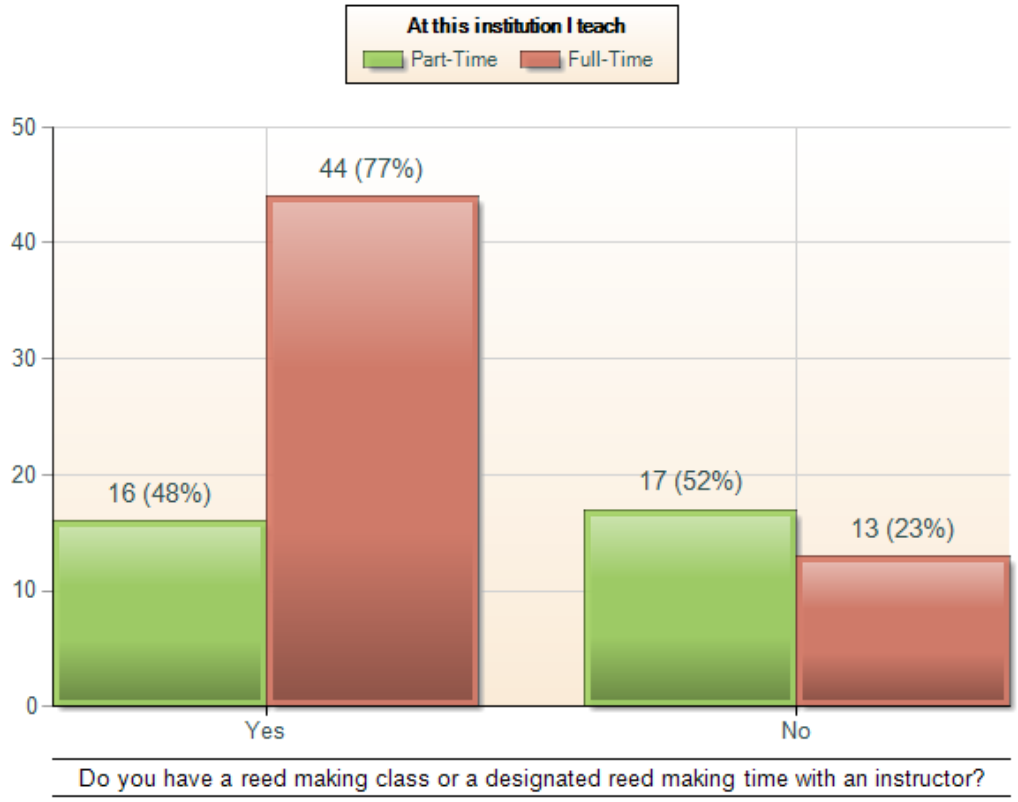
CHAPTER I: INSTITUTIONAL ATTRIBUTES

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. As we explore the type of reed making education that is common in the United States, we must ask many questions. This chapter addresses some of those questions including: What position does the typical reed pedagogue hold? What equipment is used, and how is it accessed? How often and under what circumstances is reed-making taught?

Characteristics of Instructors

First, consider formal reed-making instructors. Virtually everywhere teaching reed-making is the duty of whoever teaches oboe playing and is therefore tied to the position of professor or occasionally to the role of graduate assistant. What type of instructor is the typical teacher of oboe in the average music department? Due to the limitations of this survey, surveyed institutions did not include those with both no graduate program and a part-time or adjunct instructor. Even with these limitations, only sixty percent of the survey respondents are full-time tenured or tenure-track faculty members. This stated, the vast majority of oboe instructors in the United States are not full-time at any one institution. Many make a living as part-time instructors at multiple institutions. Some are principally performers who teach on the side. Instructors with full-time status are more likely to give reed advice outside of normal teaching hours, and three in four full-time professors offer a designated reed-making class. See Figure 1 for a full illustration.

Figure 1: Reed Instruction vs. Full-time Status



Survey responses indicate that reed time is often a part of studio time and lessons. A common sentiment expressed in the additional comments is that lessons are used for reed-making when needed according to the level and aptitude of the student. When asked if reed-making was offered for credit, only thirty-two percent indicated that it was. This further supports the assumption that full-time professors likely offer additional reed-making instruction outside of their normal load. Of those that offer reed-making for credit, many stated that it could be taken as an independent study class. Even though reed-making credit is not widespread, many participants noted that making reeds factored as a specific percentage of the students overall lesson grade. One cleverly stated that oboe playing is “part performance, part carpenter.”

There is a delicate balance between teaching oboe playing and teaching reed-making. The playing cannot happen without a reed, but the reed is only a means to an end. When asked if reed-making was a part of weekly lessons seventy-seven percent said it was, but many qualified this statement in the "additional comments" section. The following is an example of a typical response: "The point of the reed-making classes is to remove reed instruction from the lesson as much as possible… lessons are for playing". This general sentiment is balanced with, "Often touching base with reeds is the way we begin lessons." Many express frustration with time constraints: "I sometimes include reed-making [in lessons], but I can't do it every week. I only see the students one hour each week!", Or "I try to keep the reed-making in reed class so the lesson doesn't get taken over by reeds."

Interestingly, graduate students are not the sole teachers of reed-making at any surveyed institution (though one could wonder if an instructor would answer a reed-making survey if he were not the primary teacher of reed-making), and only thirteen percent of participants said that both they and their graduate student taught reed-making. The overwhelming majority at eighty-seven percent indicated that the professor/instructor alone taught reed-making. This makes sense considering the amount of reed-making that occurs during private lessons. One respondent stated, "Everyone is a part of the teaching [with] many mentors." Group mentoring is most likely to occur in studio classes and the reed room.

Reed Room

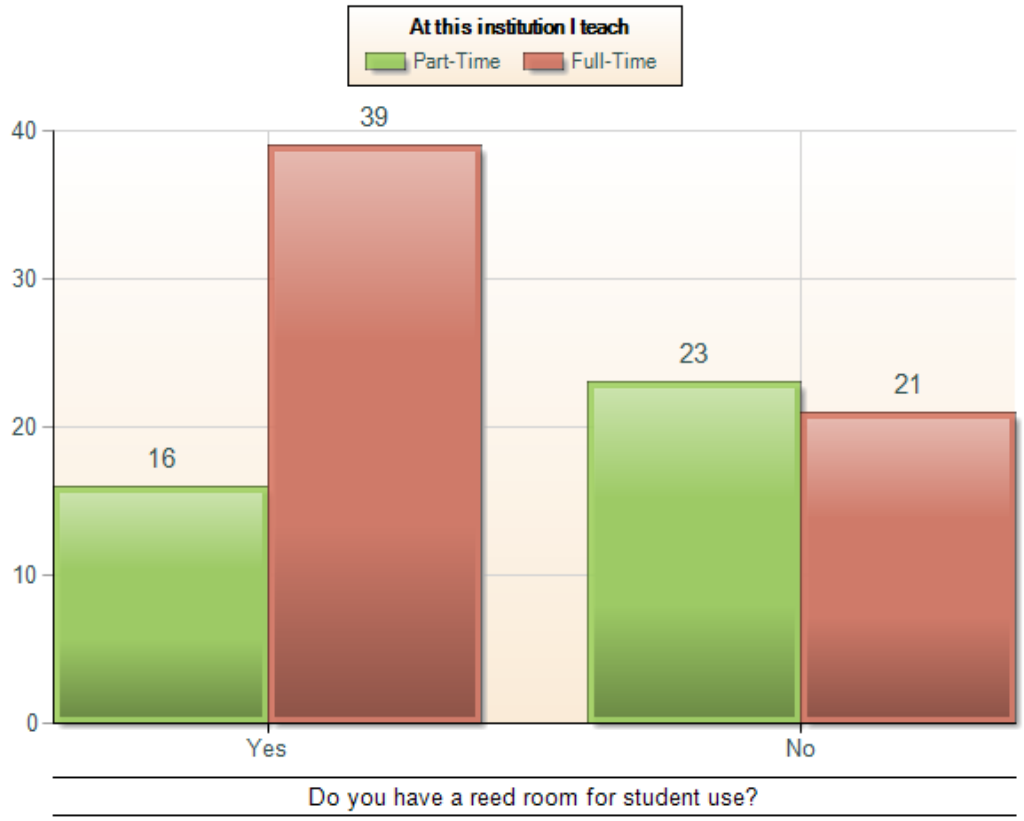
Reed rooms at universities play an integral role in the pedagogy of reed-making for students. In every music department, tiny threads, the remnants of an oboist reed-

making venture, can be seen hanging from piano benches and music stands. The strings are not confined to the reed rooms, though they appear there in piles many graduations old. After the private lesson, the reed room is the most common place to find someone learning to make reeds. Reed room lore can seem as ancient as the oboe itself; some of the first parables of reeds are told there. The reed room often doubles as a practice room, as individuals "test" their craft. It could be generally assumed that universities with reed rooms would be more likely to have students make reeds together in a collaborative learning environment. This is also most likely to occur at a university that has sufficient enrollment to justify the allocation of space for reed-making.

The survey shows that universities with a professor that is tenured or tenure-track are most likely to have a reed room. Those with full-time instructors have an equal chance at having a reed room, and those with only adjunct professors are least likely to have a reed room. This is illustrated most easily in the following chart, which compares the full-time status of the respondent with the presence of a reed room. Of all respondents only a little over half, about fifty-six percent, teach at institutions with a reed room. The size and quality of the reed room is a source of pride for instructors, and written responses to the reed room question were especially enthusiastic. One said, "One of the largest in the country!" Another stated, "Seats 15 comfortably". Still another spoke of natural lighting and even of the "microwave!" Contrastingly, from others there are complaints about space and funding problems. Some expressed that the reed room is shared with other instruments or is extremely small. Many respondents indicated that the oboe professor's personal office is used as a reed-making space at their university. Of the

sixteen responses under the “other” category, four stated that the oboe studio doubled as a reed room.

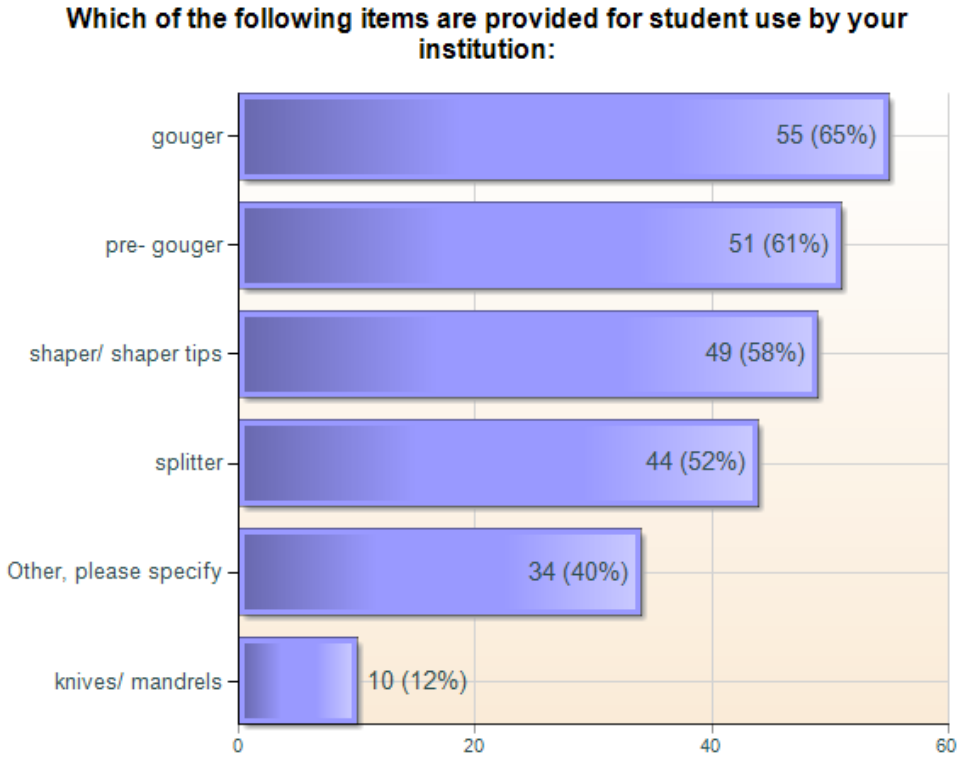
Figure 2: Reed Room vs. Full-time Status



New technology has seen advancements in the basic reed room concept. In recent years the International Double Reed Society has created an online reed room, which is a virtual community. This forum is a tribute to reed rooms everywhere in the sense that it acknowledges the importance of the reed room as a pedagogical tool. Before learning communities were in fashion, oboists had their own place to gather and discuss reeds and many other topics of interest.

It is common for some reed making tools to be provided by the institution. Gougers are the most popular of these tools: remarkably sixty-five percent of respondents have gouging machines for student use at their institutions. One proudly stated that his school has six. Gougers are particularly expensive and therefore unlikely to be owned by students since cane can be purchased already gouged. At the time of this publication, gougers ranged in price from one to two thousand dollars depending on the brand and options. Gougers are also expensive to maintain. They often require yearly maintenance and investments in additional blades. This is just outside the normal limits for a large purchase of a student but within a moderate range for a request from a faculty member at most institutions. Figure 3 illustrates the remaining reed making items that are common in reed rooms.

Figure 3: Tools Provided by the Institution



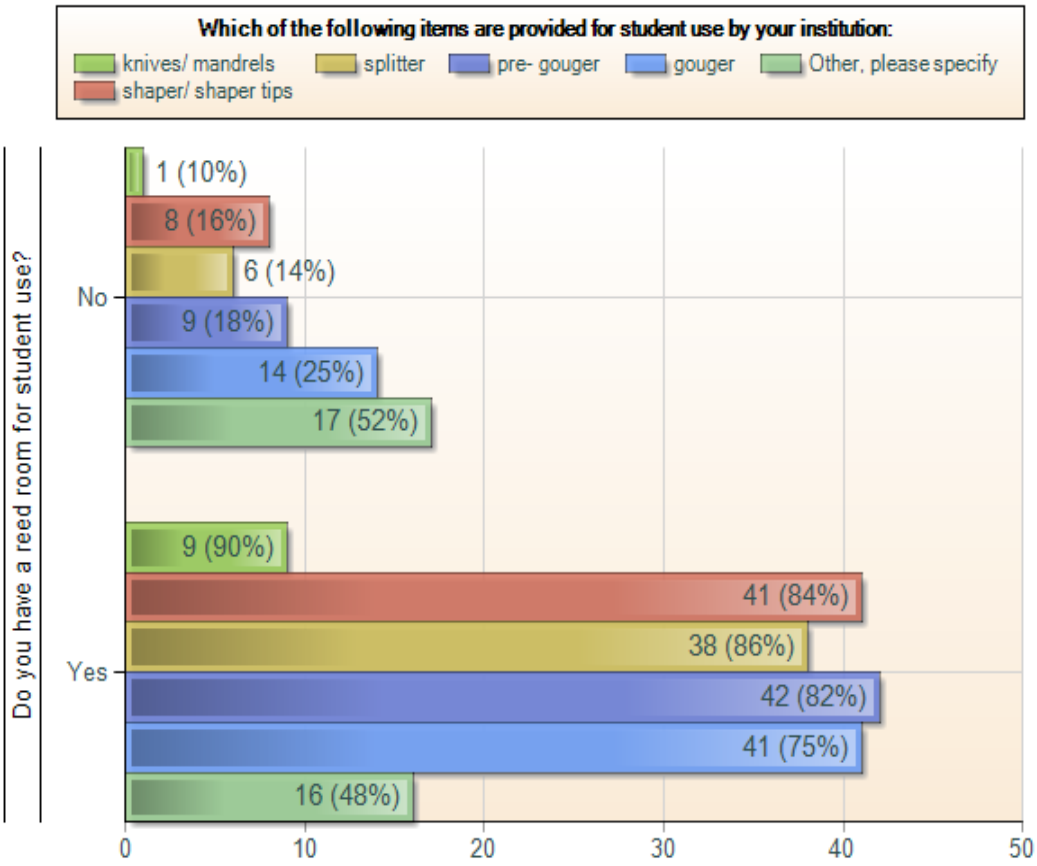
Interestingly, the survey indicated that some schools have gougers and no pre-gouger. This suggests that some find the pre-gouger to be unnecessary. It is possible to skip pre-gouging, but this puts significantly more wear on gouging machines. It is likely that with the extreme use that most University gougers see, that this is not the case. There are multiple types of pre-gougers. Some are operated by crank and other employ the use of a rod, or pusher, which pushes the cane through the planning blade. Perhaps these institutions have new gougers made to function well without planing or pre-gouging the cane, or, though this explanation is less likely, perhaps students provide their own pre-gougers.

Survey responses included various items under the "other" category, including sharpening stones, micrometers, cane and razor blades. Shapton sharpening stones, which are ceramic or diamond stones of exceeding quality, were the only items mentioned by brand more than once. Fine stones in this category are priced in the hundreds of dollars. The expense of the stones coupled with the importance of having a sharp knife explains their inclusion by respondents.

When evaluating the responses to the question of tools, it becomes obvious that the more expensive a piece of equipment is, the more likely a university will acquire it for the reed room as opposed to having a student purchase it for his or her private use. Additionally, Figure 4 compares the equipment owned by institutions that have a reed room with the equipment owned by institutions without a reed room. A student is much more likely to have access to reed tools, especially expensive ones, at an institution with a reed room. Recalling the correlation between having a reed room and having a full-time

professor, it follows that one is more likely to have access to reed tools if ones institution has full-time instructor.

Figure 4: Reed Room vs. Tools Provided



CHAPTER II: TEACHING METHODS

The survey questions attempted to quantify teaching practices related to reed-making in a usable way. Topics discussed include the requirements of a reed-making course in terms of number of reeds made and instructional materials employed. Because many aspects of teaching are intuitive and unquantifiable, it is only possible to get a general sense of the practice common to each teacher.

Jay Light's reed-making manual popularized the idea that one must make reeds in order to learn to make reeds. He repeats his teacher's advice, "Get a large laundry basket, and when it's full of all the reeds you've made, then you'll understand about reeds."[4] Certainly the frequency of one's reed-making affects the speed at which one learns to make reeds. When asked if students are required to make a specified number of reeds each week fifty-three percent of respondents answered yes. Written responses have the average number of required reeds as three a week, though some require many more. Respondents are quick to point out that the number of required reeds varies with the abilities of the student.

It is often the case that students who are not allowed to buy reeds make more reeds in an attempt to "find a good one." Question fourteen inquires whether students are allowed to purchase finished reeds. Results were nearly evenly split between yes, no and sometimes with a slight edge given to no (thirty-seven percent). The most interesting results are found when comparing the answers of those who require their students to

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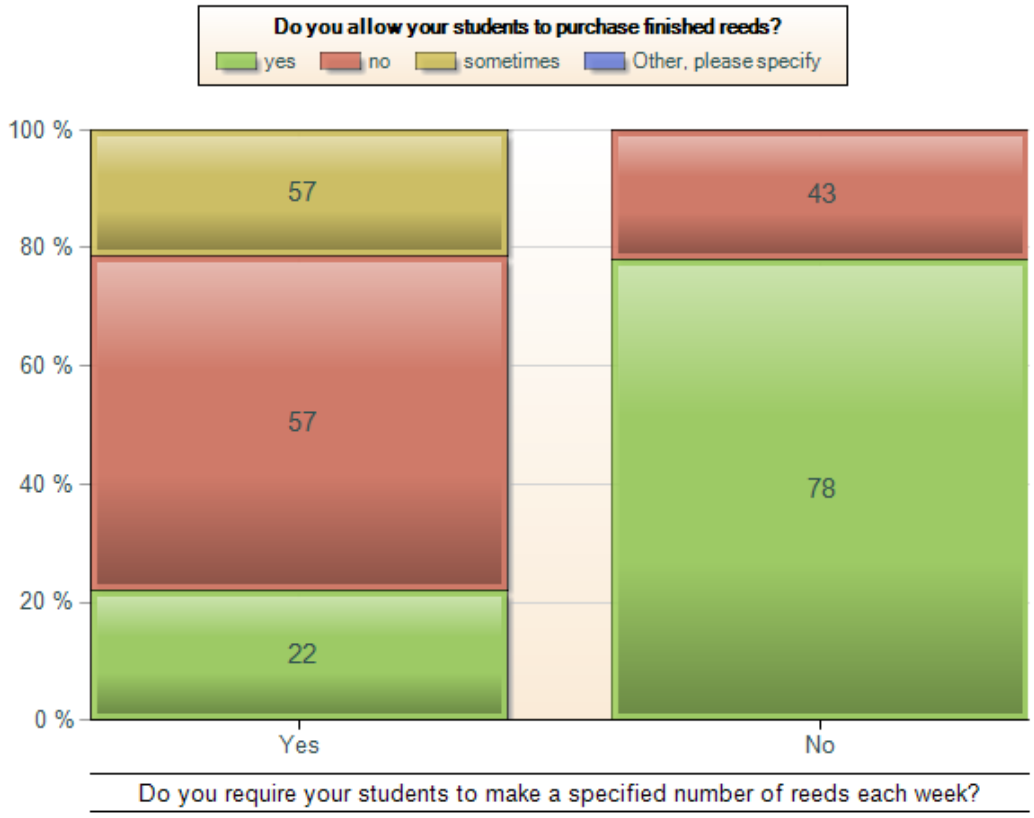
[4] Jay Light. *The Oboe Reed Book: A Straight- talking Guide to Making and Understanding Oboe Reeds*. (Des Moines, IA: Drake University, 1983, preface).

make a certain number of reeds with question of purchasing reeds. Figure 5 illustrates the results.

Figure 5: Reed Requirements vs. Purchasing Reeds



Instructors who do NOT require a specified number of reeds per week are over three times more likely to allow their students to purchase reeds. This is an overwhelming statistic.

Written Reed-making Materials

So much of reed-making instruction is an oral tradition; however, beginning reed-making method books can provide a foundation for students. The great benefit of such

instruction is the consistency it encourages. The next set of answers address the usage of reed-making materials in all mediums.

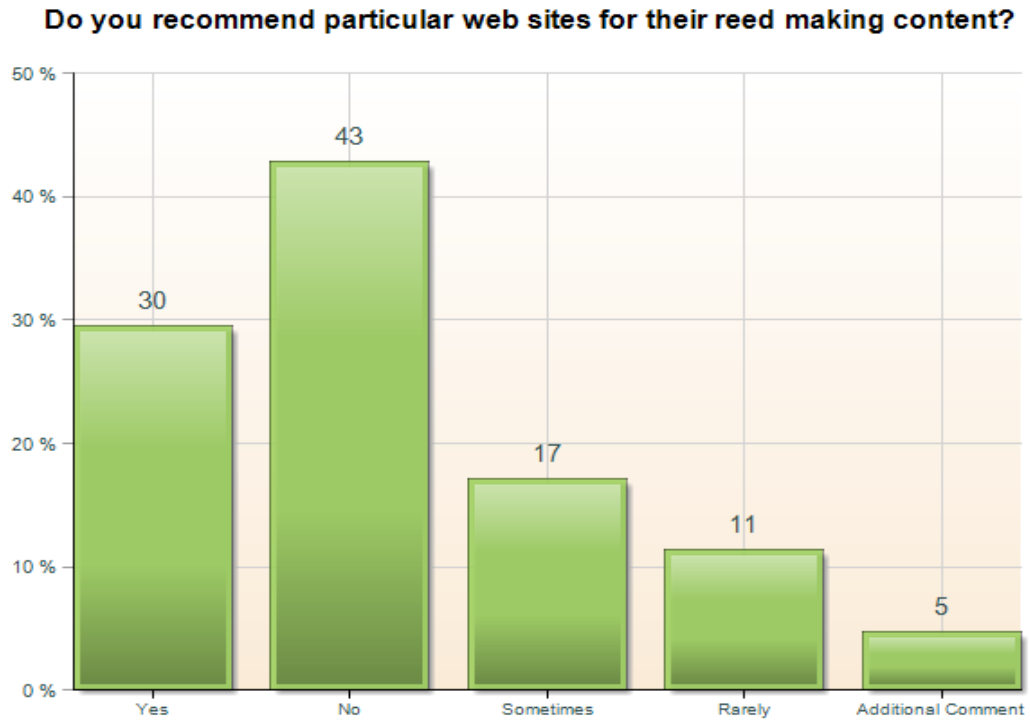
Question seventeen asks, “Do you write your own reed-making materials?” Seventy-two percent of respondents answered yes to this question. Written comments reveal various ways in which “reed-making materials” manifest themselves in studios. Some professors require the use of a notebook. The notebook is most often a compilation by the student of the teachers and other handouts. It also includes notes from oral instructions along with a record of reeds made and the results of those reeds. Others refer to the materials they produce as a “workbook.” The workbook indicates an approach that is more assignment based. A student is given tasks to complete and records their status, completion and hopefully lessons learned in the workbook.

Both approaches are similar and could be supplemented with materials from online sources, articles or special master classes. Some instructors use a handout of their own in addition to handouts compiled from other sources. Many mention diagrams as the primary written instruction to students. Diagrammatic flow charts, informal posts in the reed room, and finally PowerPoint presentations were also listed as methods of teaching reed-making. It is significant to see new technology such as PowerPoint used in the context of reed-making. One can only hope that instructors continue to use every available teaching technique.

Surprisingly, nearly half never use online sources to supplement reed-making instruction. All five respondents that left additional comments cited Martin Schuring’s Arizona State web page as the online material they recommended. Professor Schuring’s website was one of the first to emerge. It should also be noted that generally respondents

using his site were his former students. When asked if they used any particular websites answers produced Figure 6.

Figure 6: Use of web sites



More instructors indicated using articles than indicated using web materials. A surprisingly high percentage (35%) indicated that they recommended particular articles when teaching reed-making, and as many use a reed-making manual to teach. Popular manuals include those by Jay Light and David Weber. Although nearly one third of professors use outside sources in their teaching, many commented that manuals occupied a secondary position in their teaching. One wrote, “It is a resource, not a textbook,” expressing a common sentiment.

One gets the sense that although instructors have strong opinions and preferences in the world of reed-making, most are convinced that making reeds is an "experiential" learning process. If all it took to produce good reed-makers were good reed-making texts, the world would be full of excellent reeds. It seems, however, that reed-making is much like music-making. One can read about it, but to truly understand it one most experience making it himself. To learn to make reeds requires the making of reeds. Perhaps *Classical Music for Dummies*' satirical description of how to make an oboe reed is right on the money. Its ends with the instructions, "Repeat several hundred thousand times over a 20 year period until you have the perfect knack." [5]

[5] David Pogue and Scott Speck, *Classical Music for Dummies*, (Hungry Minds Inc. New York: NY, 1997), 210.

CHAPTER III: CANE PREPARATION

Selecting Cane

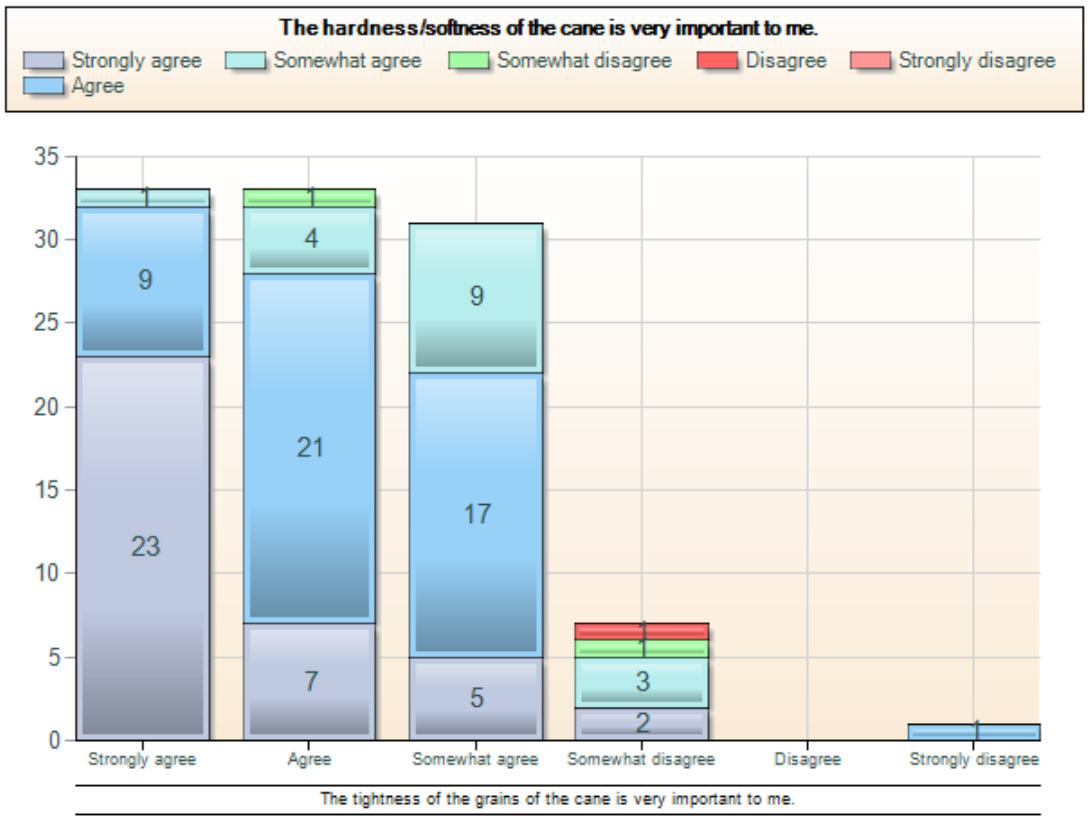
The first time I attended an International Double Reed Society conference, I became acquainted with a popular vendor. Over the course of a conversation he offered me "special" cane. Describing it with giddy excitement he said, "It was found only recently in the stash of a retired oboist. It is over twenty years old and has the most golden color." Rumors about famous oboists and their cane selection abound. A student of a very prominent player told me, "She buys a pound of cane and only uses two or three pieces… that is how high her standards are." One must understand that in the world of oboe playing, cane selection is a ritual steeped in tradition.

The technical name for the cane from which reeds are made is *Arundo donax*. This cane grows in many areas of the world, but most oboe cane originally came from France. In recent years, cane from California and China has entered the market with some success. Making oboe reeds begins with tube cane, or cane that has been harvested, dried and cut into tubes generally no longer than nine inches. Retailers from around the country sell these tubes by the pound or in increments of a pound with the smallest usually being an eighth of a pound.

Cane, much like wine, is subject to elements of weather and other similar factors that can never be fully controlled, predicted or manipulated. Some years and areas produce excellent cane and others do not. An equally difficult factor is that it is not always clear what characteristics are desirable, while some are obvious. Dan Ross, professor at Arkansas State University and a designer of gougers, pointed out one such characteristic when he said, "The problem is: God does not understand that we need

perfectly round pieces of cane." Although everyone wants round pieces of cane, some reed-makers like softer cane than others and some look for cane with certain colors or textures.

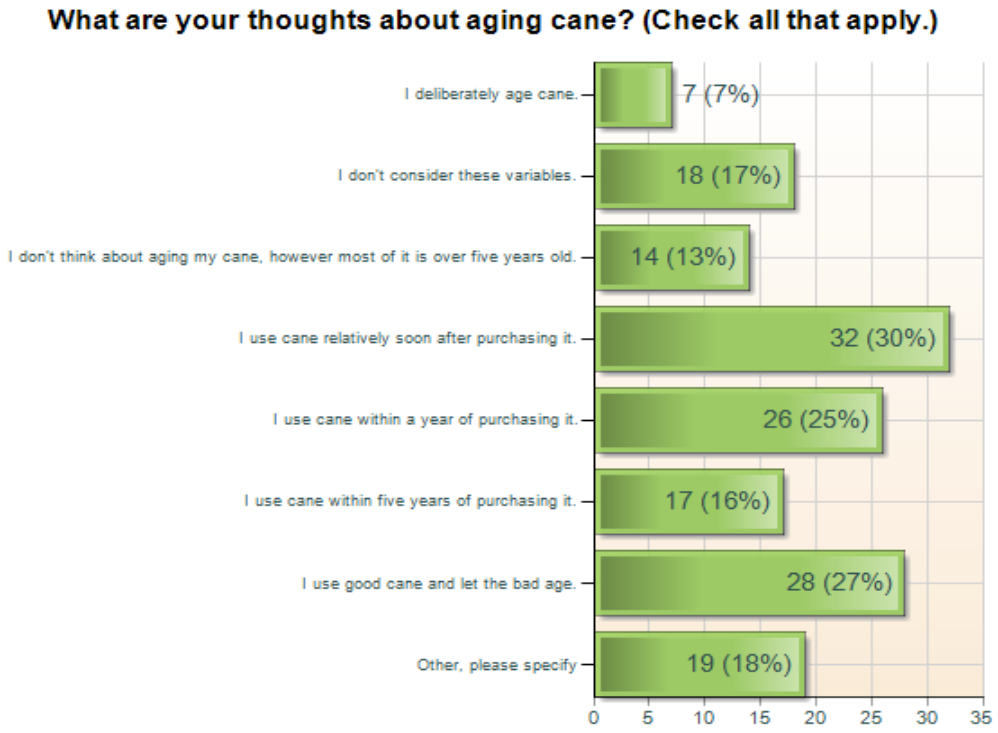
Figure 7: Cane Hardness vs. Grain Tightness



While it is generally felt that cane gets harder as it ages, many differing thoughts remain concerning the application of this sentiment. In the survey, respondents were invited to check all that apply in a question that asked them their thoughts about aging cane. One stated, "I prefer cane 20 or more years old." Many checked every category and wrote in something similar to this response, "It varies. I try it when new AND let it sit", or "I use up the good batches and let bad sit forever." Others commented on the sheer

volume of cane that they have by stating, “I have enough cane to last till I am 240”, or “I have and use cane purchased every year from 1975.” The frustration with finding good cane can be seen in the comment, “I have hundreds of pounds of cane and use maybe five percent.” Thirty percent of players buy most of their cane from one main vendor. Figure 8 illustrates thoughts about aging cane.

Figure 8: Aging Cane



Gouging

The gouger is a device designed to remove the inside of a cut piece of cane to a predetermined thickness. The gouger leaves the bark, or shiny outside, of the cane intact while thinning the inside of the cane. Before the purchase of my first gouging machine I approached a venerable old oboist who had played for years as the principal of a well-

respected orchestra. I exclaimed , “I’m getting a gouger!” He retorted was quickly, “You’re getting a pain, that’s what you’re getting.” Oboists have a love-hate relationship with the gouger. In the past it was more common for players to purchase gouged cane, but it appears that times have changed. Eighty-one percent of respondents gouge their own cane all the time and this number increases to eighty-seven percent when including those that sometimes gouge their own cane. Accordingly, most oboe professors own or have access to a gouging machine and use it to produce their reeds.

Compare two written comments about gouged cane. The first states, “Plenty of good sources to purchase it nowadays”, while the second asserts, “Purchased gouged cane quality has really plummeted.” This contradiction is typical in the oboe world. It is hard to know if it is a function of rising standards for cane or rising abilities to make reeds. Whatever the case, ask five oboists if they know where to get good cane, and you will have five different opinions.

In the introduction to the first paperback publication of Ledet’s *Oboe Reed Styles*, Richard Killmer, legendary pedagogue and professor at the Eastman and Yale schools of music, says there are at least a dozen gouging machines available for purchase these days. Within those dozen this survey’s respondents have a clear preference for four different brands: Ross, Gilbert, Innoledy, and Graf. While many others were mentioned, a full one third of respondents have owned or have access to a Ross gouger. Dan Ross has produced gougers for over thirty years.

Another gouger of note is the Innoledy machine. This gouger has only recently been introduced on the market and has at least a three-month waiting list to purchase. It has the distinction of gouging cane dry. This means that the cane does not need to be

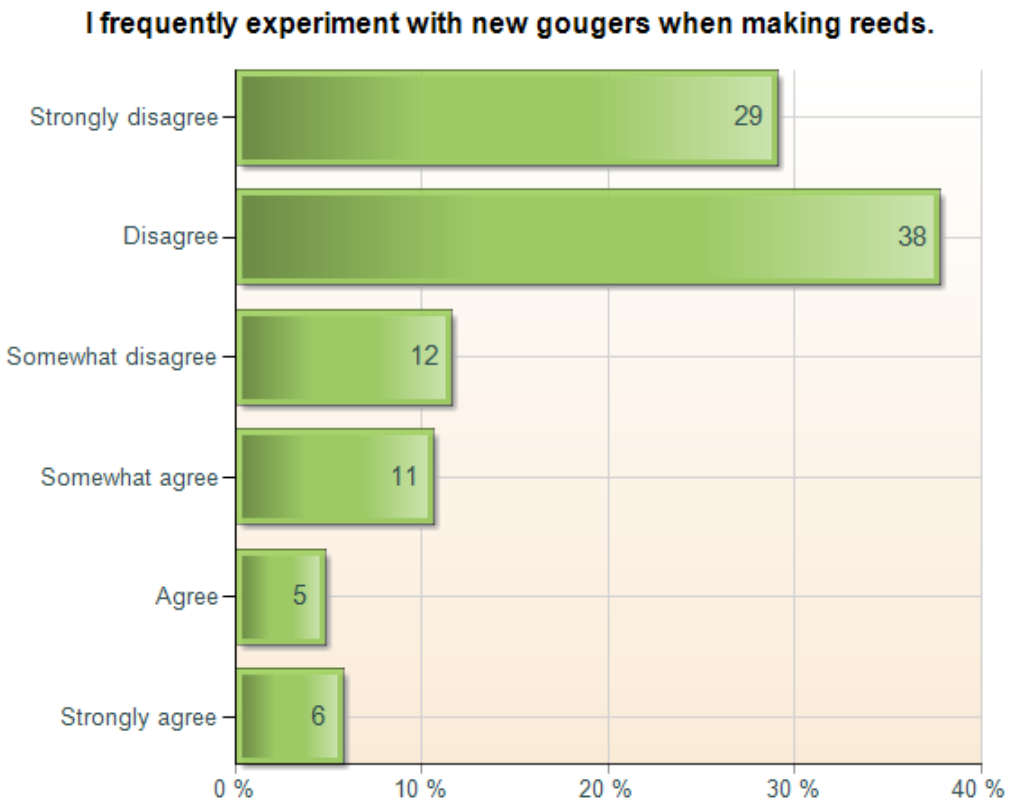
soaked for hours (generally two to three) before being placed in the bed of the gouger as with traditional designs. Tong Cui patented this remarkable machine. The first time I heard about the Innoledy gouger it was referred to as, “Tong’s magical gouging machine.” The Innoledy is special because its design is not a revamping of an older idea. Instead of sliding a blade over the top of the cane, the cane itself is pushed through a bladed opening. Only time will tell whether this design will become an industry standard, but the results today are promising.

Because a gouger is a hand-operated mechanism, which gouges the inside of a split piece of cane to a certain thickness, it has varying rates of accuracy depending on the consistency of the operator. Ideally, the resultant cane is thicker in the center and thinner on the sides. The center-to-side ratio is only one important factor of the gouge along with the center thickness itself. It is very difficult to accurately measure the difference between the center and the side and compare this information between reed-makers because the measurements are so small.

Participants were asked in an open-ended response question about the measurements of their gouger in order to allow them to indicate as much information as possible. “Do you know the setting of your gouger? (Side vs. center thickness, etc.)”. Of the eighty-five responses, twenty-three answered with a simple “yes” while only three answered “no”. Others clarified the exact dimensions they used: .58-.60mm is by far the most common center gouger setting. All but three responses fell between those measurements. One explained that they use “.63 mm in the center... for the frigid MN winter.” The manipulation of the thickness of the gouge is one way that oboists combat climate extremes.

The importance of the gouge is obvious. It seems that players are likely to find a gouge that meets their needs and remain committed to it. When asked on a sliding scale, "I frequently experiment with new gougers when making reeds," a very high percentage of teachers disagreed with that statement. Truly, it would be expensive to experiment too frequently with new machines, however the new developments in the world of gougers indicate that there is still room for innovation and experimentation. I suspect that most oboists would settle for simple consistency.

Figure 9: Experimenting with Gougers



Shaping

The final step in cane preparation is shaping. A gouged piece of cane is placed on a shaper, which consists of a handle with a metal form in the shape of an oboe reed attached. The metal shape is a pattern upon which the cane is placed. With relatively little skill and a straight edge razor blade, an oboist can produce multiple pieces of gouged cane with exactly the same shape.

Early shapers were made of wood, but metal shapers have been the standard for nearly a century. Today, the best shaper manufacturers use computer driven precision machinery to cut shapers with accuracy to thousandths of a millimeter. It is also possible to exactly replicate a favorite shape of a popular teacher or performer. At the same time shapes retain their integrity and are longer lasting than ever before, being made from hardened steels. There are thousands of shapes available to oboists today. One can even have a shape made to specification by companies clamoring to create the next big hit. The average price for a shaper tip rages from one to two (sometimes three) hundred dollars. Most players own at least two shaper tips.

The Gilbert minus one shape is one of the most commonly owned, but shapes by the Adams company are also extremely popular. These shapes are some of the most carefully and solidly constructed. Caleb minus one is very popular, although trends in shapes shift quickly.

CHAPTER IV: TYING THE REED

The act of attaching a piece of cane to a staple or tube is referred to as "tying" or "wrapping" a reed. The successful completion of tying results in a reed "blank." Many respondents indicated that producing quality and consistent blanks was often the most significant struggle of the young oboist. Eight of the survey questions dealt with aspects of reed tying.

Staple

The selection of the staple, sometimes referred to as the tube, is extremely important. Everything from the type of material from which it is made to the size of each segment of the staple greatly affects the finished reed and therefore the tone produced on the instrument. Much has been said about the metal used. Some, indeed most, information is anecdotal. It is hard to ignore the often-repeated statement attributed to John Mack, legendary former principal oboist of the Cleveland Orchestra: "Would the lone ranger use brass bullets?" This statement alone has prompted generations of players to play on nickel silver staples.

Because the staple functions as an extension of the instrument bore, other aspects such as the thickness of the wall and the shape of the slope of the staple also have great bearing on the finished reed. There are many aspects of reed-making that have remained the same from the earliest baroque oboes, such as the necessity of a sharp knife and the use of a plaque, a small flat piece of metal or wood inserted between the blades of the reed to facilitate scraping a single blade. The staple, however, is one item that has undergone a radical change since the earliest days of oboe reed-making.

Originally players made their own staples from sheets of metal, usually tin. The player cut the metal and wrapped it around something similar to today's mandrel, which looks like a thick ice pick, to form a tube. The ends of the sheet of metal were soldered together and the tube was covered with cork so that it could be inserted into the well of the oboe. This process could be extremely inconsistent. Eventually staples were manufactured commercially, but the manufacturing process still lead to very inconsistent reeds. In order for a player to know if his staples were the same shape and size, he would place them on his mandrel. The idea being that when you had a good staple, one on which consistently good reeds could be made, it would serve as a pattern for all others you might buy. One would examine the way in which the staple fit the mandrel and buy only staples that fit their mandrel in exactly the same way. Thus the use of a mandrel was traditionally considered extremely important in gauging the quality and shape of pre-fabricated staples.

Commercial manufacturers produce staples today with ever increasing accuracy. In the recent past, the most common metals were nickel silver or brass. This is illustrated in the Prodan question, which asks users to indicate which of these two options they use. Today there are an even greater variety of choices as staples can be gold plated or solid gold in addition to silver, nickel silver or brass.

About a decade ago Mark Chudnow, a popular instrument repairman and vendor, developed a different type of staple, which he called the "super staple." Instead of cork, Chudnow uses two replaceable rubber rings, which create a seal with the sides of the well of the oboe. These Chudnow staples have proven to be truly "super" as the "E" and "S" staples have become industry leaders. These staples are just another option for the oboist.

Additionally, staple manufacture has become much more standardized. For example, the Chudnow brand staples are hollowed out from a single piece of metal. This requires no soldering and therefore produces no seam. The overall consistency of size for these staples is extremely high, nearly all of them fit a Chudnow mandrel exactly. This virtually eliminates the need to use the mandrel as a test for staple consistency. Now the use of the mandrel is primarily a question of comfort for the reed maker and is often more a function of the size of the player's hand. A resounding ninety-eight percent of respondents said that they use a mandrel when tying a reed.

The shape of the opening of a staple also has great bearing on the function of the reed. The more open the staple the less open the reed and vice versa. When using the same shape of cane, a reed must be tied shorter when on a staple with a larger opening and longer when using a staple with a smaller opening. The length of the staple affects not only intonation but tone color as well.

Most respondents use Chudnow, Stevens or Loree tubes. Of the 104 "write-in" responses for this question only seventeen did not specifically mention one of these three brands. Respondents were then asked for their favorite brand, if they gave more than one answer, and of those the Chudnow staples were the clear favorite with Stevens, Loree and Pisoni staples each getting 6 votes as compared with the eleven for Chudnow. This is extremely significant in the last decade as a new method of manufacturing staples has been nearly universally accepted by the double reed community.

The only "other" lengths mentioned under the other category were 45mm and 46.5mm. Two respondents said they used 46.5mm staples. Interestingly, this length is not a standard advertized staple length. These must be specially ordered or cut form a longer

staple, which is an ominous task. When asked about the overall length of the tied reed, a resounding ninety-four percent said that they did measure this length consistently.

Lengths between seventy-one and seventy-five mm are given as the total tie length. Many explained that this is a function of the relationship between the staple and the shaper tip. This means that the reed should be tied such that the sides of the blades close at a certain position relative to the opening of the staple and position of the tie.

Tying Materials

A piece of shaped cane is tied to the staple by wrapping thread around the cane to seal it to the staple. Before the advent of synthetic polymers, reeds were wrapped primarily with silk. Silk had a tendency to loosen if it got too wet and this, combined with its relative price as compared with nylon, has virtually eliminated the use of silk. Today, most reed makers use nylon. There are two types of common thicknesses of nylon, EE and FF. FF is slightly thicker than EE. Although dental floss is mentioned in various articles on reed-making, no respondent admitted to using it to wrap reeds. This said, the author has seen floss used many times by players as a quick fix and as a cheap readily available substitute to nylon.

For a perfectly manufactured reed, the material used to tie a reed would hardly matter; however, different materials offer different advantages and disadvantages. Silk tends to break during the tying process more often than nylon, but the strength of nylon allows one to tie with inconsistent pressure- a negative or positive depending on the person. Some reed-makers use upholstery thread, or a thread that is even thicker than FF. Upholstery thread is suggested in Jay Light's manual for oboe reed making. He believes that this type of thread lies flatter on the staple and provides a more secure wrap. One

insightful participant asked, “Does it matter?” The answer is that it does affect the reed making process, but quality reeds can be made using any of these materials.

Process of Tying

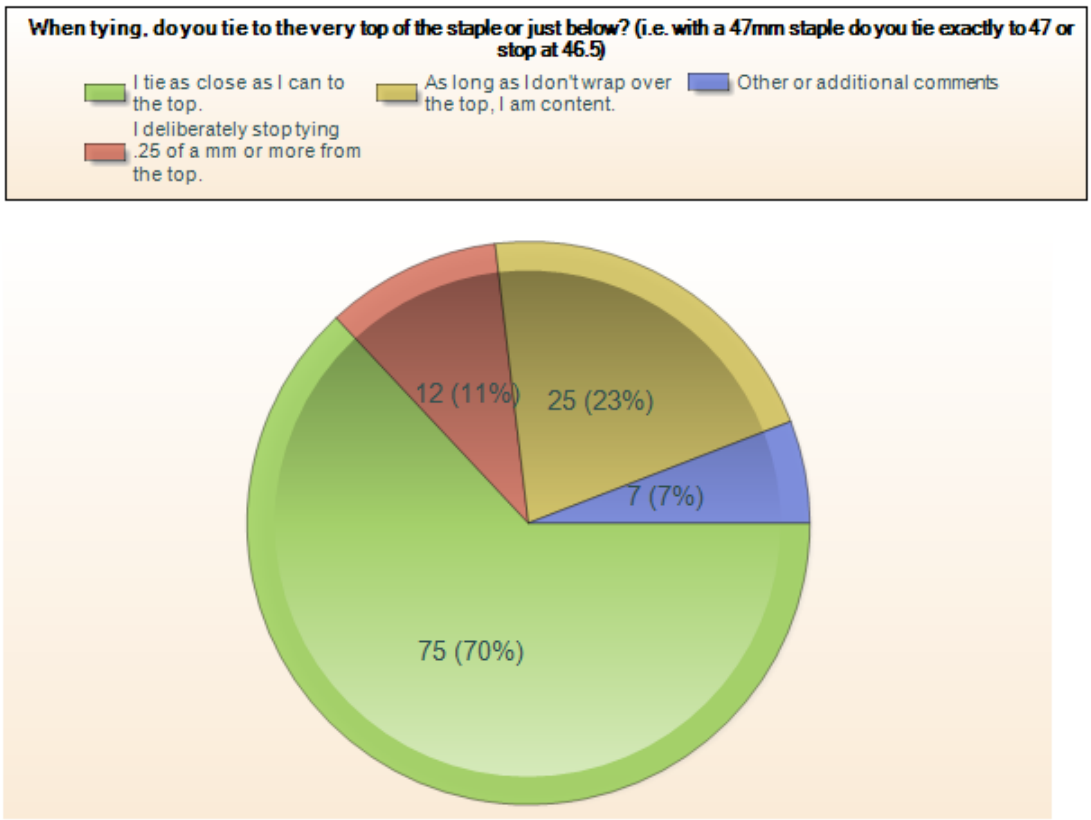
The general tying procedure is a follows: A staple is selected on which the reed will be wrapped. A piece of cane is placed on the staple and the total length from the bottom of the staple to the top of the folded cane might be measured. A spool of thread, having been previously attached to a sturdy item, is wrapped around the cane to secure it to the staple. The maker generally starts about 3mm from the top of the staple and wraps upwards stopping at some point before or at the top of the staple. The resultant binding is then crossed over with the string and the maker wraps downward, ties a knot and cuts the string off.

Tying over the top of the staple results in a reed with dampened and inconsistent vibrations. In contrast, players who tie below the top of the staple effectively increase the vibrating surface of the reed by whatever amount they tie under as compared with those who tie flush with the top. Participants were asked how close to the top of the staple they intend to tie. Seventy percent answered simply that they tie as close as they can to the top. Interestingly eleven percent said they deliberately stop tying .25mm or more from the top of the staple.

The following chart shows the preference of players when asked how close to the top of the staple they tie. When looking at the additional comments, we generally see players specifying how many “wraps” or turns of the thread remain before the top of the staple when they are tying. For example, two respondents said that they stop “one wrap from the top of the staple.” A “wrap” using FF thread (the most common variety) is less

than half of a millimeter. A “wrap” using EE thread is between a third and a fourth of a millimeter.

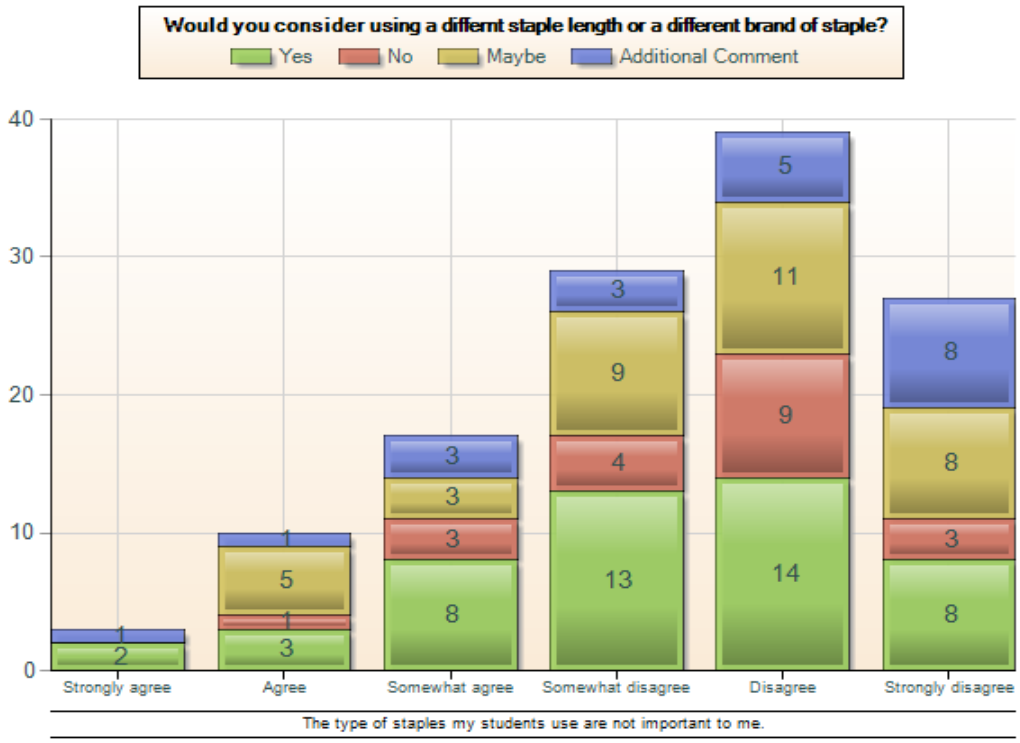
Figure 10: Tying to the Top of the Staple



Of the eight questions asked about tying, all but one show a clear preference for one answer among respondents. From this we see that compared to other aspects of reed-making, tying seems to be fairly standardized in the United States today. The question receiving less than a seventy five percent consensus inquired whether or not the player would consider using a different staple length or a different brand of staple. Interestingly, twenty percent said they would not. When compared with the answers to question 70 we

see Figure 11. Most players are not interested in trying a different type of staple and most are particular about the type of staple that their students use.

Figure 11: Experimenting with Staples vs. Student Staple Use



A resounding ninty-two percent use 47mm staples. Ninty-four percent generally measure the total tie length for their reed, and eighty-eight percent say that they purposely slip the blade of their reeds as they tie them.

Slipping the Blades

As the sides of a folded piece of cane begin to meet, many players anticipate that the edge of the two sides will not remain completely lined up through the length of the reed. It is generally considered wise to deliberately displace the blades the same direction

on each side in order to control the opening and the seal of the reed. This practice is commonly referred to as “slipping” the blades. Accordingly, eighty-three percent of respondents purposely slip the blades of their reeds as they wrap. Eight of the twelve additional comments for this question emphasized that this slip should be very small. The comments were adamant, such as “a LITTLE” or “Slightly!” Another reed maker echoes those concerns by explaining, “And I'm not sure that I like doing that! It often makes too much overlap so I've been experimenting lately.” One frustrated respondent exclaims, “THE OBOISTS IN THE REST OF THE WORLD DO NOT SLIP THEIR REEDS! ONLY IN THE US!” The slipping of blades is found in all three major manuals about reed-making. The slip can also be seen in many of the American reed-makers’ examples in Ledet’s book, however none of the diagrams in Prodan’s compilation specifically mention or indicate a slip.

Question thirty-five confirms that among those who slip their blades, most slip in the opposite direction from the pull of their wrap. This means that right-handed reed-makers will have the back blade slipping to the left. Written responses indicated this also. This practice is consistent with the assertion that the wrap of the binding pulls the blades on the staple. It is beneficial for the pull to be in the direction opposite of the “slip” to keep the reed from slipping too much. Opinions about slipping appear to have reached a tipping point. Although those who disagree, like the before mentioned respondent, are very outspoken, this appears to be an area that is somewhat unique in that within a relatively short period of time this practice has become standard.

CHAPTER V: SCRAPING THE REED

Knives

The question of how tools have changed through the years is one of obvious interest to this study. It appears that with the exception of gougers and shapers, reed making tools have remained constant through the years. While knives are produced in new ways today, they accomplish the same purpose as those in former days. The plaque, mandrel and cutting block follow the same expectations.

As the oboe world has become more commercial, the typical knife has changed only slightly. As might be expected, having a sharp knife regardless of type is a priority for all oboists. Jay Light declines to address knife sharpening for any knife other than the double hollow ground. His instructions for knife sharpening are for right-handed players sharpening a double hollow ground knife on an unspecified stone. These instructions merit mention, as they are some of the most widely used. I have heard individuals give up certain knives simply because the knife is too hard to sharpen.

It seems that preferences in knife sharpening are cyclical, faddish almost. Some find a method that works for them and stick with it but many continue to experiment with different methods. Leather, stones, metal rods and crock sticks are among the most popular sharpening implements.

There are two commercially available texts dedicated completely to the topic of knife sharpening for double reed players. While examining the most popular reed making manuals we see stone sharpening as the most common procedure. These manuals were written between the years of 1980 and 1990. Over eighty percent of instructors today use

a double hollow ground knife either exclusively or in conjunction with another knife. Twenty-six percent use a beveled knife.

Measurements

One of the most significant questions asked was whether or not the instructor uses measurements when teaching reed-making. Using measurements is the most easily quantifiable way to standardize basic reed construction. The biggest problem with using measurements is that measurements alone don't guaranty a consistency that is sufficient to obtain truly wonderful reeds. One must measure to be consistent but plan to adjust the reed afterwards. Over eighty percent of respondents indicated that they encourage the use of measurements most of the time, with a full fifty-seven percent saying that they encourage measurements all of the time when they are teaching. "Students need specifics as they are learning" contrasts with "Scrape for how it plays, not for how it looks" in the "comments" section. Only three percent said they never use measurements. Ten percent said that they either never or rarely used measurements.

Although oboists are very likely to measure the various sections of their reed, they are not likely to measure the thickness of the blades. A little over half of those surveyed said that they do not encourage the use of a micrometer, while eighteen percent said that they do suggest using the micrometer. One possible explanation for not encouraging micrometers is likely the inaccuracies of the micrometers themselves. When dealing with such thin pieces of wood, inaccuracies are common and small differences are the big differences that determine the final quality of a reed.

Contrasting Thicknesses

Sections of an oboe reed can easily be discerned in most cases. There are five elements of the reed that are commonly referred to in recent oboe reed-making literature: the tip, heart, back, spine, and rails. Even the most inexperienced of reed-makers can identify each of these sections. The question of the relative thicknesses between each of these parts of the reed is one of the primary issues in reed-making.

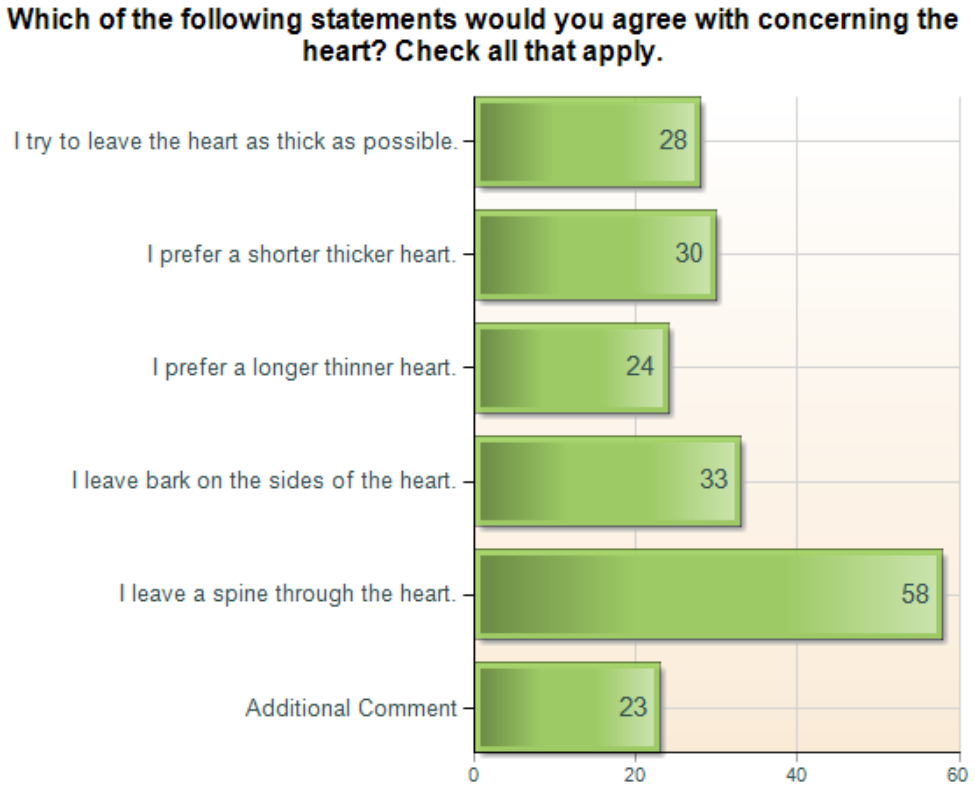
All reed-makers can observe the presence of a spine and rails in a reed if desired. Establishing the importance of these elements in the reed is the purpose of two of the survey questions. In both instances over eighty percent of reed makers said that a visible spine and bark on the rails was either essential or very important. Less than five percent feel that it is not at all important. Thoughts about the qualities of the "heart" of the reed, which directly follows the "tip" are seen in Figure 12. Respondents could check as many boxes as they wished.

Question forty-three inquires whether the reed-maker can anticipate patterns in finishing a reed. Specifically, it asks what section of the reed is most likely to be scraped in the last few scrapes. A resounding sixty-five percent indicated that they were likely to scrape the tip last. The next closest answer was the heart with fourteen percent and then the back with eight percent. Additional comments stressed that it depends on the reed. Four respondents indicated that they scraped the transition from the tip to the heart, which is sometimes referred to as the blend.

In order to scrape the tip of a reed to the desired thinness nearly all oboists use a plaque. The plaque is a flat thin sheet of material which is inserted between the blades. Most of the time it is made of steel, although some reed-makers prefer a rounder version

made of wood. Before working on the tip with the plaque the player will scrape some on the reed to prepare the double reed to be opened. About half of respondents scrape the entire length of the reed before opening the tip. Opening the blades of the tip can be done in many ways. While this statistic alone does not indicate much about the finished reed, it sheds light on the sequence that reed-makers scrape each section of the reed.

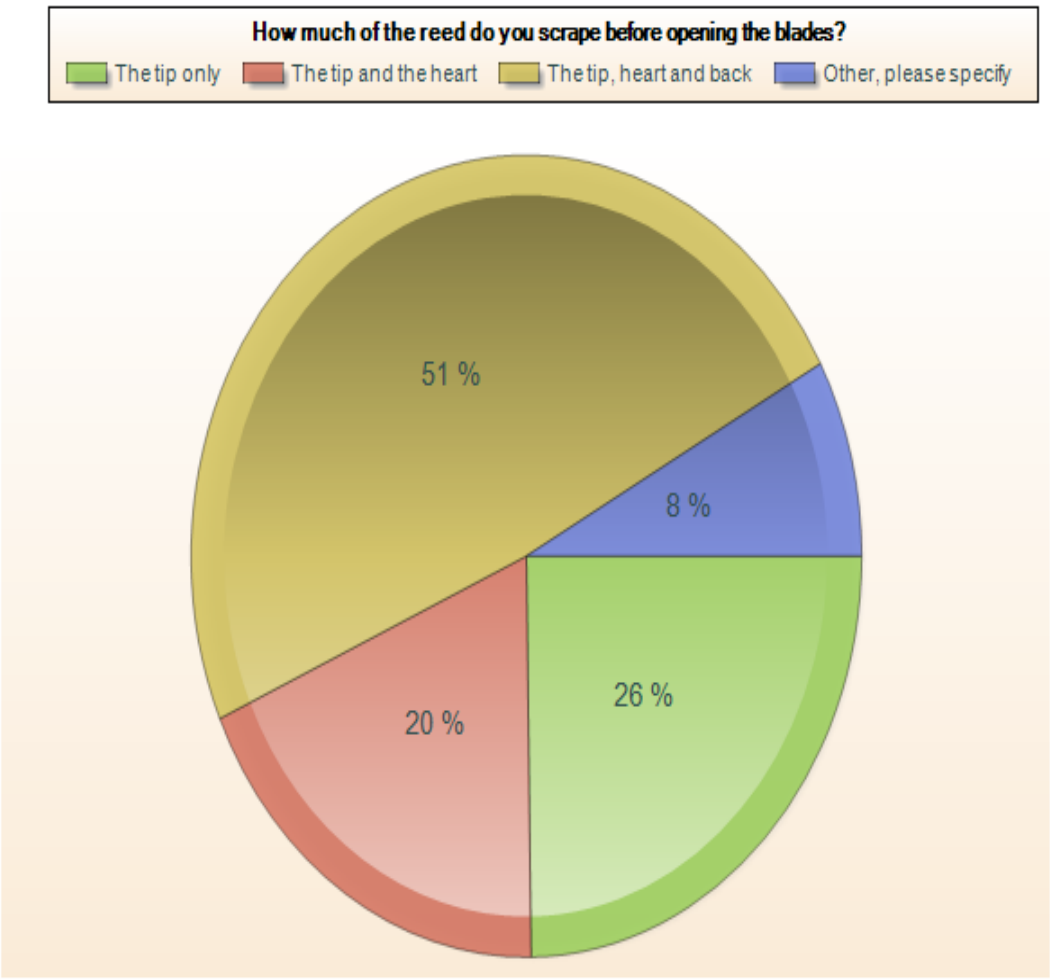
Figure 12: Thoughts on the Heart



American reeds are called “long scrape” reeds because the reed-maker scrapes the bark (or shiny surface) of the reed off along its entire length. Short scrape reeds, which are still played in many areas of the world, have bark covering over half of the vibrating surface. When considering the differences between the American long scrape reed and

the short scrape reed from which it was derived, we notice that those who scrape the back of the reed before clipping the tip are scraping more bark off the reed before it makes any sound than would be scraped off of a finished version of a short scrape reed. Figure 13 illustrates this statistic.

Figure 13: Scraping Before Opening Blades



CHAPTER VI: ENVIRONMENTAL CONCERNS

Reed-makers either consciously or unconsciously consider many variables in addition to the piece of cane when attempting to make this piece of wood vibrate. Humidity, altitude, and barometric pressure all affect the performance of a reed and factor into decisions about how to scrape it. All three of the above mentioned factors are linked. As you travel in an area of higher altitude, atmospheric or barometric pressure decreases and you are likely to experience less humidity. Although all of these environmental factors greatly affect the vibrations of a reed, this survey reveals an obvious hierarchy in the amount of conscious thought given to each concept.

Altitude

In the past two decades much has been written about high altitude reed-making. *The Double Reed*, the principle scholarly journal for oboists and bassoonists and the official publication of the International Double Reed Society, published two articles on making bassoon reeds at high altitudes in the spring of 1991. Ronald Klimko and Gary Moody address the common stuffiness and hardness that most reed-makers experience when bringing a reed to a higher altitude. Among the suggestions Klimko makes for high altitude reeds are three ideas that are also pertinent to oboe players: using softer cane, a larger shape, or a thicker gouge. [6] Rebecca Kemper Scarnati, professor at Northern Arizona University, suggests cane with a thicker gouge and smaller diameter.[7] The idea of using a thicker gouge might be counterintuitive to those that understand that the

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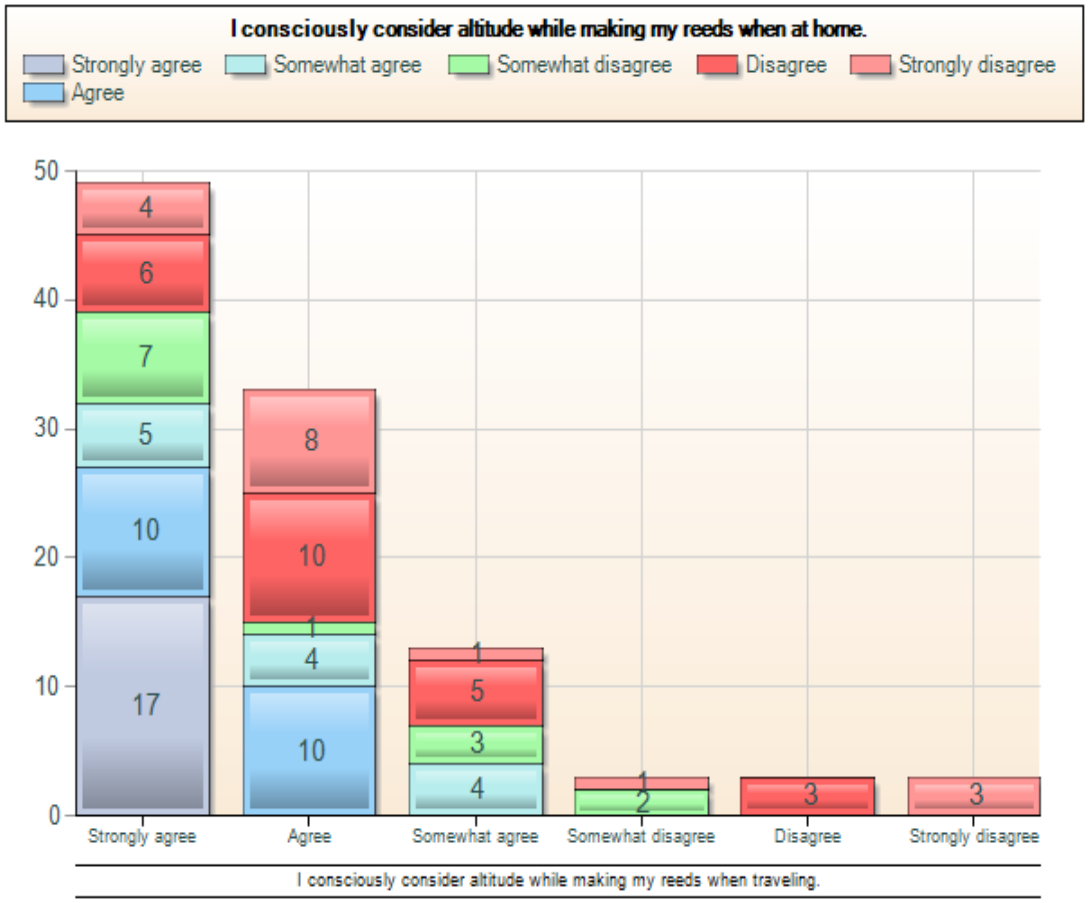
[6] Klimko, Ronald. "Bassoon Reed-making at Higher Altitudes: An Investigation." *The Double Reed*, 14 (Spring 1991): 82.

[7] Scarnati, Rebecca Kemper. "Oboe Reed Notes from Seven Thousand Feet," *The Double Reed* 18 (Spring 1995): 75.

response problems in high altitudes require a thinner reed. Moody clarifies the benefits of a thicker gouge as he explains that the thicker gouge causes the final reed to be constructed from cane that is farther from the bark and therefore generally softer.[8] This illustrates a common element in that art of reed-making. Reed-makers can achieve similar results using very different methods.

Figure 14: Considering Altitude



[8] Moody, Gary. "Strategies for Reed Making at Higher Altitudes," *The Double Reed* 24 (Winter 2002): 84.

Among the three variables considered in this survey, altitude receives the most consideration from reed-makers when traveling. Many reed dealers are also offering "high altitude" reeds. Online sources such as Cascade Oboe Reeds and Currie Reeds have reeds specifically designed for high altitude playing. The prominence of literature on the subject and the obvious nature of travel between different altitudes contributes to the responses in Figure 14.

When asked if the respondents consciously consider altitude at home, they were nearly evenly split between those that agree and those that disagree. When asked if they consider altitude when traveling a full ninety percent said that they did. Since altitude is relatively easy to ascertain and is the only of the three variables that is constant in a given location, this is not too surprising.

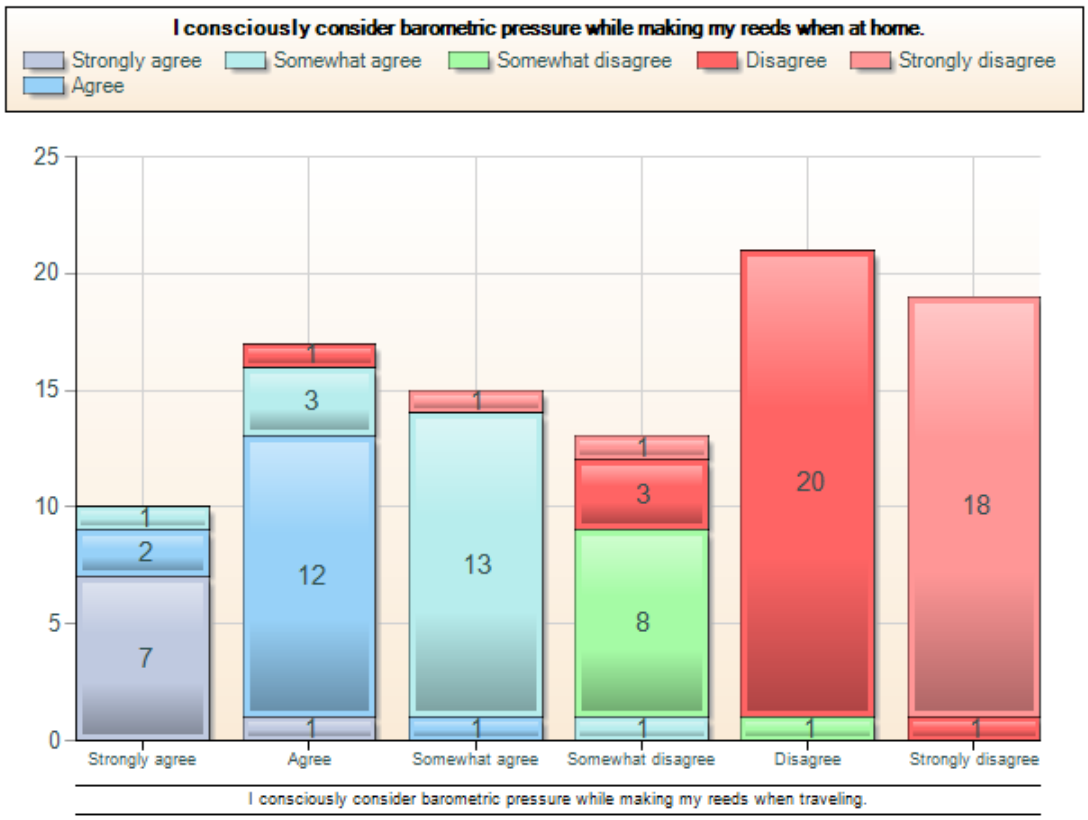
Barometric Pressure

Klimko sums up a common observation among reed makers when he says, "I learned long ago not to work on reeds on days of rapid barometric pressure changes, such as rainy days, etc.; but to wait for those stable 'high pressure' days to fine tune the 'monsters'." Barometric pressure is a measure of the weight of the atmosphere. As such, barometric pressure decreases with increases in altitude. Atmospheric pressure is often measured in millibars (mb) and an average variance between a high-pressure and low-pressure system is about 20mb. When the barometric pressure is high, cane will vibrate easier, although this measurement is much more subtle than traveling to an area of lower elevation.

This chart shows that there is little difference between the ways one thinks about barometric pressure at home versus while traveling. About half of the respondents think

about barometric pressure while at home and for the most part that same half continues to think about barometric pressure as they travel. In essence you either think about it or you don't.

Figure 15: Considering Barometric Pressure

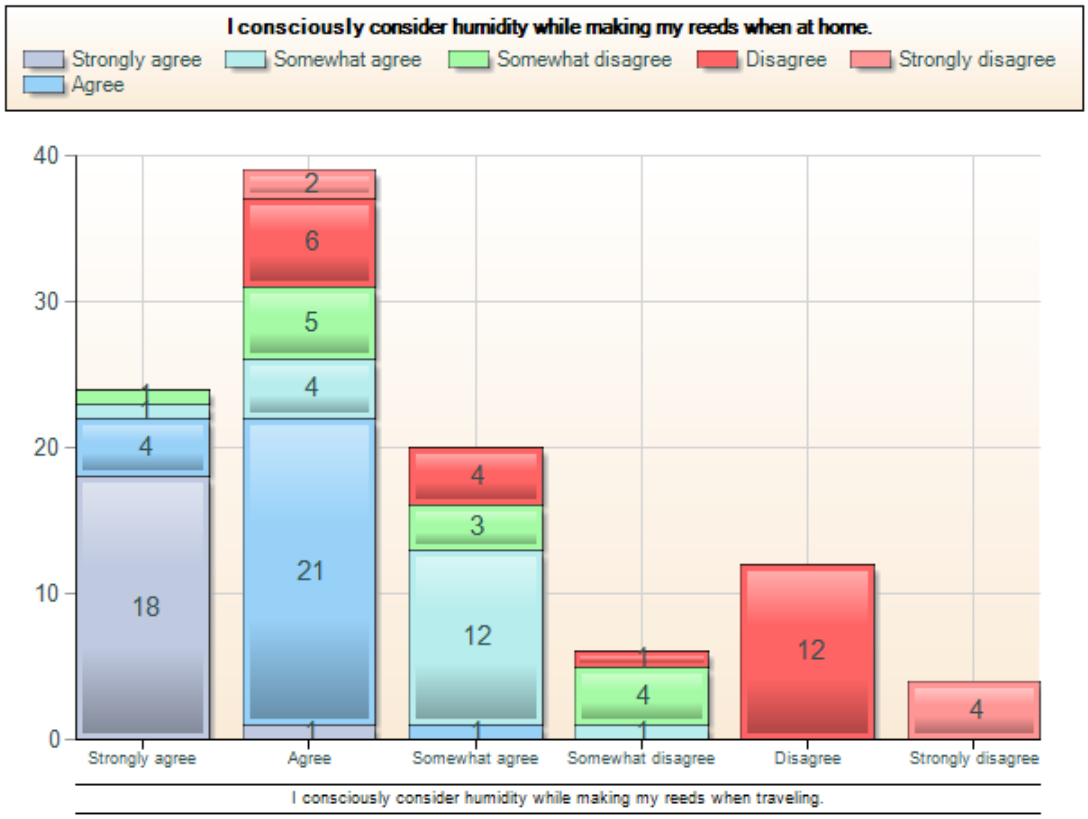


Humidity

The final environmental difference addressed in the survey was that of humidity. Sixty percent agreed to some level that they consider humidity while making reeds at home. This increased to nearly eighty percent when traveling. I know of no articles that address humidity as a factor in reed-making, despite the responses given. It is most

common to think about humidity in conjunction with reed care.[9] Humidified reed cases are sometimes used to prevent warping, which can occur if a reed dries out too quickly. In extremely dry climates reeds can actually dry out while being played. This said, if a piece of "dry" cane has more moisture than another piece of "dry" cane because of the humidity, it would affect the vibrations of the cane. In most instances reed makers feel that areas with more humidity have easier vibrating reeds.

Figure 16: Considering Humidity



[9] Loren W. Bartlett, "Reed Longevity", *The Double Reed* 13 (Spring 1990).

CONCLUSION

The impact of reed-making in the oboe world cannot be understated, and yet there has been relatively little written on the pedagogy of reed-making. Reed-making pedagogy is important to examine, because students go on to become teachers, performers, and contributing members of the oboe community. This essay sought to synthesize the results of a study conducted in 2009 amongst college-level oboe professors into a reasonable snapshot of oboe reed-making today. It identified both consistencies and differences of opinions amongst the modern oboe pedagogue, and tracked developments in oboe reed design and construction since the most recent attempt to address reed-making pedagogy broadly, the Prodan survey-based research project, published over three decades ago.

Developments since the Prodan survey include technological advances in equipment such as gougers and staples, and an increasing emphasis on accurate mass production. Standardized oboe reed-making practices include tying procedures, slipping the blades, taking into account certain environmental aspects, cane preparation, lengths of staples, and tying materials. A great deal of variety and difference of opinion still occurs in the area of shaper tips, facilities (including what equipment is provided and the availability of a reed room), reliance on written or online materials to supplement reed-making instruction, formal versus informal reed-making instruction, preferred staple materials, and the procedure for scraping the reed.

Although reed-making pedagogy has largely been an oral tradition, with the popularization of the internet and ease of sharing ideas as indicated by the virtual "reed room" discussion boards one can find, there is much room for collective innovation as we

study the methods and philosophies currently being taught in modern American colleges and universities.

APPENDIX A: COVER LETTER

Cover letter

You are invited to be a part of a comprehensive survey on reed making pedagogy in the United States.

This survey is a part of a project which follows in the spirit of David Ledet's *Oboe Reed Styles* and James Prodan's *Oboe Performance Practices and Teaching in the United States and Canada*. You have been selected as one who could make a valuable contribution to this topic. This project hopes to present a large snapshot of how reed making is taught in the United States in 2008-9. Results will be published on the web and will be available to all participants.

Please consider completing this survey at your earliest convenience. Your responses are important. If you have any questions do not hesitate to contact me.

Thank you in advance,

Elizabeth Young

Follow up email

A few days ago you received an email inviting you to participate in a survey about oboe reed making in the United States. If you have already completed the questionnaire, I would like to thank you for your participation.

If you have not had a chance to complete the survey, please take a moment to do so now. Your participation is important.

Thank you,

Elizabeth Young

APPENDIX B: SURVEY

Teaching Oboe Reed-making

This survey consists of 74 questions. The vast majority are multiple choice.

1. Please provide the following information. You may leave any portion blank if desired.
    Name:
    Company:
    Address:
    City:
    State:
    Zip:

2. Institution: (If you teach at more than one institution, please indicate a primary institution that you are referencing in your responses.)

3. At this institution I teach
    Part- time
    Full- time

4. My position is
    Tenure/ Tenure track
    Lecturer/ Instructor
    Artist-in-residence
    Visiting
    Adjunct
    Emeritus

5. Your background: (You may include education, bio, teachers, or whatever information you wish. Feel free to copy and paste from your own sources.)

Questions about your institution

Please note that your participation is extremely valuable and any additional information or clarifications to your answers is welcome.
You may mark as many answers as apply on multiple-choice questions.

6. Do you have a reed room for student use?
    Other, please specify

7. Do you have a reed making class or a designated reed making time with an instructor?
Other, please specify

8. If you answered yes, do you offer credit for reed making?
    Additional Comment

9. Do you, a graduate student, or both teach reed making?
    me
    graduate student
    both
    Other, please specify

10. Is reed making a part of weekly lessons?
Additional Comment

11.Which of the following items are provided for student use by your institution:
    knives/ mandrels
    shaper/ shaper tips
    splitter
    pre- gouger
    gouger
    Other, please specify

12. Do you require your students to make a specified number of reeds each week?
Additional Comment

13. Do you require reading assignments covering reed- making topics?
    Yes
    No
    Sometimes
    Additional Comment

Questions about your teaching methods

14. Do you allow your students to purchase finished reeds?
    yes
    no
    sometimes
    Other, please specify

15. If you answered yes, from whom do your students purchase reeds?
    me
    other local source
    internet
    don't know
    Other, please specify

16. Do you use a reed making manual in your teaching?
    Yes
    No
    Sometimes

Rarely
Additional Comment

17. Do you write your own reed making materials?
Additional Comment

18. Do you recommend particular web sites for their reed making content?
Yes
No
Sometimes
Rarely
Additional Comment

19. Do you recommend particular articles about reed making?
Yes
No
Sometimes
Rarely
Additional Comment

20. What in your opinion are the most common problems of the young reed maker?

Questions about your own reeds
Cane Preparation

21. How often do you make reeds?
Daily
Weekly
Every few weeks
Monthly
Rarely
Never
Other, please specify

22. Do you gouge your own cane?
Yes
No
Sometimes
Additional Comment

23. If so, which gouger(s) do you use most often?

24. Do you know the setting of your gouger? (side vs. center thickness, etc.)

25. Do you usually buy cane from one or multiple venders?
one main vender

multiple venders
Other, please specify

26. What are your thoughts about aging cane? (Check all that apply.)
I use cane relatively soon after purchasing it.
I use cane within a year of purchasing it.
I use cane within five years of purchasing it.
I don't think about aging my cane, however most of it is over five years old.
I deliberately age cane.
I use good cane and let the bad age.
I don't consider these variables.
Other, please specify

Tying

27. Which brand(s) of staples do you use?

28. If you mentioned more than one brand, do you have a current favorite?

29. What length(s) of staples do you primarily use?
46
47
Other, please specify

30. Would you consider using a different staple length or a different brand of staple?
Yes
No
Maybe
Additional Comment

31. Do you generally use a mandrel when tying reeds?
Additional Comment

32. Do you generally measure the total length when you tie a reed?
Additional Comment

33. If so, what is the total length of your tied reed?

34. Do you purposely slip or overlap the blades of your reeds as you tie?
Additional Comment

35. If so, in which direction do you make this slip?
back blade to the left
back blade to the right
either way

Other, please specify

36. Which of the following do you use to tie reeds?
Nylon string FF
Nylon string EE
Silk
Floss
Other, please specify

37. When tying, do you tie to the very top of the staple or just below? (i.e. with a 47mm staple do you tie exactly to 47 or stop at 46.5)
I tie as close as I can to the top.
I deliberately stop tying .25 of a mm or more from the top.
As long as I don't wrap over the top, I am content.
Other or additional comments

Scraping

38. Which of the following knives do you most commonly use?
double-hollow ground
beveled
razor
don't know
doesn't matter as long as its sharp
Other or additional comments

39. Do you encourage the use of measurements for different sections of the reed in your teaching?
Yes, all the time
Yes, most of the time
Sometimes
Rarely
Never
Other, please specify

40. Do you encourage the use of a micrometer during the scraping process?
Yes
Sometimes
Rarely
No

41. How important is it to have a visible spine in your reed?
not at all important
somewhat important
very important
essential

42. How important is it to leave bark on the sides (rails) of the reed?
    not at all important
    somewhat important
    very important
    essential

43. When finishing a reed, referring to your last few scrapes, which section are you MOST LIKELY to scrape?
    Tip
    Heart
    Back
    I have seen no patterns in my reed making.
    Other, please specify

44. Which of the following statements would you agree with concerning the heart? Check all that apply.
    I try to leave the heart as thick as possible.
    I prefer a longer thinner heart.
    I prefer a shorter thicker heart.
    I leave bark on the sides of the heart.
    I leave a spine through the heart.
    Additional Comment

45. How much of the reed do you scrape before opening the blades?
    The tip only
    The tip and the heart
    The tip, heart and back
    Other, please specify

46. When initially clipping the tip, what is the resultant length of the reed?
    I clip the smallest possible amount in order to open the reed.
    I break the reed open with my plaque.
    I clip a millimeter or two from the total length.
    I clip the reed to a length close to my finished length.
    I don't measure this.
    Other, please specify

47. When clipping the tip, do you deliberately clip one blade shorter than the other?
    Yes
    No
    Other, please specify

48. If you answered yes to the last question, what criteria do you use to decide which blade should be shorter?
    Does not matter

The weaker blade should be shorter
The stronger blade should be shorter
Other, please specify

49. Do you deliberately scrape one blade differently from the other based on any specific criteria?
Yes
No
Sometimes
In the following case(s):

Philosophies

50. I frequently experiment with new scrapes while making reeds.
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

51. I frequently experiment with new shapes.
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

52. I encourage my students to use the equipment I use.
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

53. I encourage my undergraduate students to experiment with different shapes.
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

54. I encourage my graduate students to experiment with different shapes.

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

55. I frequently experiment with new gougers when making reeds.
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

56. I consciously consider humidity while making my reeds when at home.
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

57. I consciously consider humidity while making my reeds when traveling.
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

58. I consciously consider altitude while making my reeds when at home.
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

59. I consciously consider altitude while making my reeds when traveling.
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

60. I consciously consider barometric pressure while making my reeds when at home.
    Strongly agree
    Agree
    Somewhat agree
    Somewhat disagree
    Disagree
    Strongly disagree

61. I consciously consider barometric pressure while making my reeds when traveling.
    Strongly agree
    Agree
    Somewhat agree
    Somewhat disagree
    Disagree
    Strongly disagree

62. I often use a different diameter cane when traveling.
    Strongly agree
    Agree
    Somewhat agree
    Somewhat disagree
    Disagree
    Strongly disagree

63. I often use a different length staple when traveling.
    Strongly agree
    Agree
    Somewhat agree
    Somewhat disagree
    Disagree
    Strongly disagree

64. The crow of a reed is very important to me.
    Strongly agree
    Agree
    Somewhat agree
    Somewhat disagree
    Disagree
    Strongly disagree

65. The color of the cane is very important to me.
    Strongly agree
    Agree
    Somewhat agree
    Somewhat disagree

Disagree
Strongly disagree

66. The tightness of the grains of the cane is very important to me.
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

67. I like to make reeds.
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

68. The hardness/softness of the cane is very important to me.
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

69. The type of staple I use is very important to me
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

70. The type of staples my students use are not important to me.
Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

71. I make reeds to address the needs of specific works, e.g. I make reeds that play best in the upper register for works that have a good deal of high playing, or make reeds to play

the second oboe part to Dvorak cello concerto, or to manage flutter tongue or multi-phonics?

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

72. I am generally happy with my reed making methods.

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

73. I consider my reeds to be of higher than average quality.

Strongly agree
Agree
Somewhat agree
Somewhat disagree
Disagree
Strongly disagree

74. Additional comments:

APPENDIX C: SURVEY RESULTS

1. Please provide the following information. You may leave any portion blank if desired.
   115 Responses [See participant list, Appendix E, pg. 98]

2. Institution: (If you teach at more than one institution, please indicate a primary institution that you are referencing in your responses.) 94 Responses [See institution list, Appendix D, pg. 95]

3. At this institution I teach

Part-Time	41	41%
Full-Time	60	59%
Total	101	100%

4. My position is

Tenure/ Tenure track	53	52%
Lecturer/ Instructor	19	19%
Artist-in-Residence	3	3%
Visiting	0	0%
Adjunct	25	25%
Emeritus	1	1%
Total	101	100%

5. Your background: (You may include education, bio, teachers, or whatever information you wish. Feel free to copy and paste from your own sources.)
   95 Responses [See participant list Appendix E, pg. 98]

6. Do you have a reed room for student use?

Yes	58	56%
No	46	44%
Total	104	100%

1	At NEC, not BU or Bard
2	One of the largest in the country! Fits 16!...with lockers and a full sink.
3	Students have access to a university gouging machine, shaper tip, and other equipment. There is space for students to work with this equipment, although there is not a specifically designated reed room.
4	I have a reed room at Abilene Christian University.
5	I share a studio with the flute instructor- but have managed to get a key to the studio, which the oboe students can check out (including over night). They are free to use the studio whenever it is available.
6	Practice rooms and dorm rooms or apartments are used.
7	But it is extremely small!
8	In lessons only
9	Band room
10	Still waiting for grant approval for this project!

11	Oboe studio has a 4'X8' window allowing natural light to enter; studio size is about 14'X20'.
12	I have a small room attached to my office, used as the double reed room, which seats 15 comfortably
13	Would have, if at all possible. Space and funding problems.
14	a small room with the following equipment: oboe and English horn shaper tips, shaping machine, gouging machine and accessories, hardness tester, and a microwave!
15	I work out of my studio and a classroom
16	depending upon the size of the studio, we either work in my office or in the organ studio.

7. Do you have a reed making class or a designated reed making time with an instructor?

Yes	64	68%
No	30	32%
Total	94	100%

1	No
2	One hour per week, oboe studio reed making class AND approx. 15 minutes of individual reed making instruction at nearly every private lesson.
3	I will have a 1-hour reed seminar starting fall 2009 at Abilene Christian University
4	sometimes
5	We have a weekly studio class in which the students perform and we do reed work. I would say 50/50.
6	I hope to do this in the fall
7	I have dedicated entire quarters to reed making.
8	Graduate Teaching Assistant often has hours devoted to reed assistance. I incorporate into lessons.
9	Reed class.
10	during lessons I devote some time every week to working on reeds students have begun to scrape but not totally finished
11	One hour/ week on certain Fridays
12	I meet individually with the freshman and sophomore oboe majors for 30 minutes each week, to work on reeds (in addition to the regular one hour lesson each week).
13	Whatever part of lesson time is appropriate for the student.
14	Whenever we have time
15	Reed making lessons are usually done as "independent study," a separate one-hour "class" (one-on-one) per week for qualifying/interested students.
16	Reed class is divided between lower division and upper division oboe students.
17	Freshmen take a 1 hour/week class for reedmaking.
18	I perform in an as needed basis with individual students.
19	The reed making class, which I started four year ago at The University of South Florida meets for one hour, one day a week

20 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
21 We cover reedmaking in lessons, and sometimes during the weekly studio class.
22 We have a master class once a week where we mostly work on reeds
23 I hold reed camp at my house
24 once a week we have a studio class which is used for reed time or Woodwind Area recitals.
25 One hour weekly
26 Upon request of a music major, I can offer a reed making class for independent study credits.
27 Twice weekly reedmaking classes as well as one-on-one time with the instructor.
28 We do a studio class that is sometimes dedicated to reed making. Otherwise, it's done in the lessons.
29 Reed making is not an official class...yet. Right now any time a student needs extra reed making help they set up individual time. Master classes may also be devoted to group reed making. But, I prefer to teach small groups of 2-3 students and break my studio up for non-credit reed making classes.

8. If you answered yes, do you offer credit for reed making?

Yes	28	32%
No	59	68%
Total	87	100%

1 It's part of oboe playing, part performance part carpenter.
2 There is no credit for the reedmaking class or extra lessons students have. However, it is part of their oboe lesson grade and is incorporated into the curriculum I have developed.
3 Part of the Pedagogy class
4 It's integrated into our Studio Class, which the students take when they sign up for lessons.
5 Students may take independent study for credit
6 No additional credit- but their overall grade is certainly affected if they don't show up having done the required reed work.
7 One may undertake an independent study topic in reed making
8 I teach reed making during our studio class which is required for students receiving two credit hours.
9 But it is counted as percentage of the regular lesson grade, which, of course, is for credit.
10 Class meets once per week for one credit.
11 Students receive 1/2 credit for the class.
12 It will be for credit next year.
13 Reed making is a component of the applied (studio) grade
14 Reed-making can be taken as an independent study for credit (1 credit per semester.)

15 reed making and rep class is required of students studying privately for credit
16 If you get some "yes" answers, I would LOVE to find out how they got it approved! I would be really interested to talk to people about this topic because I think it should be for credit.
17 studio class is included in lessons.
18 for only six or less semesters
19 Yes one unit per quarter, I think.
20 No, not as a class in the university schedule. However, their progress is factored into their applied lesson grade.

9. Do you, a graduate student, or both teach reed making?

me	90	87%
graduate student	0	0%
both	14	13%

1 EVERYONE is a part of the teaching. Many mentors
2 My TA is always available to help students.
3 Professor of oboe instructs all reed seminars.

10. Is reed making a part of weekly lessons?

Yes	79	77%
No	24	23%
Total	103	100%
other, please specify	3	3%

1 Depends on the capability of the student.
2 Often, touching base with reeds is the way we begin lessons.
3 10-20 minutes per lesson (in addition to the hour class each week.
4 Yes, but the point of the reed making classes is to remove reed instruction from the lesson as much as possible. So, lessons are for playing unless the student really needs reed help.
5 I sometimes include reed making, but I can't do it every week. I only see the students one hour each per week!
6 I include reed making for oboe majors/minors who are taking at least 1-hour lessons.
7 But not on a regular basis.
8 It's covered when needed, but not every lesson.
9 Not really. I try not to take up the limited lesson time we have with reedmaking, although I will help students if they need it.
10 When necessary
11 I give my students two lessons per week--one playing, the other reed-making
12 Most of the time- especially if they are struggling.
13 Minimally - I try to spend lesson time playing rather than working on reeds. I have time set aside for students outside of lessons for reedmaking.
14 Sometimes. I try to keep the reed making in reed class so the lesson doesn't get taken over by reeds.

15 Reed lessons are separate.
16 but most reed instruction takes place in studio class
17 The reed making time is a separate part of the weekly schedule for each student, in addition to the regular weekly lessons.
18 Yes, if help is needed in addition to the reed making class.
19 unless there is an upcoming/critical performance and the current reeds are not adequate
20 We have a lesson which is strictly playing. Reed making is done at times other than lesson times, either individually or as a class.
21 Usually
22 Reed making is taught as part of "Oboe Master Class", which meets once a week for one hour credit.
23 Most reed making issues are dealt with in Master Class
24 It depends on what they have. If they are stuck and have something new, I will fix it.
25 Not officially, but "tweaking" of reeds is usually part of a lesson.
26 Students are expected to build reeds outside of lesson time; however, there's always flexibility with lesson time to include reed adjustment, pending student's need.
27 But mostly for those who are not able to come to the reed class because of class conflicts.
28 Not so much the first year, but during the years when there is no separate class, it is incorporated into lessons.
29 This varies from student to student. At Brown, there is no major in music performance. So, some of my students do not devote very much time to reedmaking. For those students, we do not necessarily work on making reeds during lessons. For other students, we devote some time each week to reedmaking.
30 Students can bring reeds for me to look at.
31 Reed adjustment
32 25%
33 Not every lesson, only when there is a problem or a specific reedmaking skill to address.
34 when extra time besides reed class is needed
35 I try to take as little time as possible from lessons - I'd much rather deal with it all in reed hour, but sometimes you have to fix reeds in an emergency situation in a lesson.
36 Most students here are not advanced enough to make reeds. This is a rural state university where most major in music ed. There are almost no performance majors on any instrument.
37 at times
38 Fridays is set for reed making
39 Depends on student level and progress. I usually work with getting the student to really play the oboe with proper support, embouchure, etc. before venturing into reed-making.

11. Which of the following items are provided for student use by your institution:

knives/ mandrels	10	12%
shaper/ shaper tips	49	58%
splitter	44	52%
pre- gouger	51	61%
gouger	55	65%
Other, please specify	34	40%

1 Gouger at Bard, nothing at NEC or BU
2 A set of Shapton sharpening stones
3 micrometer
4 They collectively buy cane. I supply razor blades
5 six gougers
6 None
7 The student purchases all reed-making items.
8 none. all personal equipment
9 None
10 none of the above
11 None
12 We have all of that equipment in the reed room.
13 none
14 steels, stones
15 Personal equipment
16 micrometer
17 I hand out a good bit of my own cane
18 None at this time.
19 Students are responsible all reed tools & supplies
20 We have micrometers and some sharpening stones.
21 none, graduate student has his own gouger
22 radius gauge, micrometer
23 none provided
24 None
25 see above
26 none
27 None of the above
28 0
29 I have a reed kit for student use
30 students must have their own supplies
31 Shapton sharpening stones
32 none
33 Nothing is provided by the institution
34 micrometer, sharpening stones, tube cane

12. Do you require your students to make a specified number of reeds each week?

Yes	48	47%
No	55	53%
Total	103	100%

1	I need them to have reeds that are up to the job at hand!! They need to make a lot of reeds, ideally.
2	3 minimum required for each reed class, additional reeds in lessons
3	I have a target goal for the reeds produced weekly.
4	2-4 new reeds must be brought to each lesson for review & finishing (in addition to having at least 2 reed blanks with them at all times).
5	1 for non-music majors; 3 for music majors
6	I recommend 20 per week. Most exceed that total.
7	Yes, number of required reeds varies with experience and major.
8	3
9	Oboe majors need to produce at least one new reed a week.
10	3 finished reeds a week
11	Depends upon the student's ability as to how many.
12	I expect students to bring 3 new, playing reeds each week in reed class. The often numerous attempts that don't reach "playable" level do not count.
13	No not officially- but I try to encourage bringing new ones..
14	I request 3 new reeds per week. It does not always happen
15	Three FINISHED!
16	They make as many as needed for their rehearsal/practice needs
17	Majors have reed requirements. These vary by year and degree program
18	Education majors (B.M.E.) are required to make 4 reeds each week. Performance majors (B.M.) are required to make 7 reeds a week.
19	They all make many reeds per week. I do not have to specify a number with my current class. I have had to specify in the past.
20	I have suggested starting one a day, but I have not required it.
21	Varies
22	3 reeds minimum
23	1-5 reeds, minimum, depending on level.
24	Students are required to make a minimum of three reeds per week; students must also maintain a minimum of three concert reeds in their possession.
25	This varies from about 2-4 reeds/week depending on their level and quality of reeds.
26	We are not a conservatory, so I am not imposing on my student’s reed making.
27	At Least three attempts per week. In the least they are to produce at least one attempt and have at least two wrapped prior to each class.
28	Next year it will be three a week.
29	They are encouraged to make 7 a week.
30	1
31	I try . . . .
32	Three reeds per week, as much as possible.
33	three for each lesson to a specified stage
34	3

35 bring in 3 new reeds each lesson - implies that MANY more were made to arrive at this!
36 For majors, I suggest they should be working on 6 reeds a week. If they are taking the reed making class, they must present 2 new finished reeds each week.
37 3 reeds a week.
38 Again, depends on the student.

13. Do you require reading assignments covering reed- making topics?

Yes	20	19%
No	25	24%
Sometimes	59	56%
Additional Comment	7	7%

1 Handouts
2 I suggest relevant materials.
3 this would be a good idea
4 Jay Light's book on reed making is very helpful.
5 This varies based on needs of students.
6 Library available in Reed Room
7 N/A

Questions about your teaching methods

14. Do you allow your students to purchase finished reeds?

yes	32	30%
no	39	37%
sometimes	28	27%
Other, please specify	20	19%

1 Yes only if they have another academic area.
2 I'll supply them if needed.
3 non-majors are allowed to purchase finished reeds.
4 The reed-making novices are allowed to for a while.
5 I don't forbid doing so, but they do not.
6 NEVER
7 Officially no; yes for a new reedmaker, briefly.
8 Blanks
9 My non-major students are permitted to buy reeds.
10 Only for back-up emergencies
11 They usually make them, and I may adjust them.
12 only to supplement as their own get better
13 I encourage them to make their own.
14 If I think they need and would benefit, then yes.
15 I give my students reeds for two yrs max.
16 Frosh/Soph use my reeds; Jun/Sen must make own.
17 non-majors
18 Only if they are a music management major.

19 Freshman may use their former source until making
20 if a non-major

15. If you answered yes, from whom do your students purchase reeds?

me	27	38%
other local source	17	24%
internet	36	50%
don't know	3	4%
Other, please specify	18	25%

1 I give them reeds without charging anything
2 Two former students
3 Me and Marty Neubert
4 Y. Harding, double reed shops
5 I encourage them to purchase from Weber Reeds
6 Any source that conforms to my criteria is acceptable
7 I usually give them reeds when available.
8 I often give them my reeds for free, no cost.
9 Students are forbidden to purchase commercial reed
10 Various sources--I encourage Sorton reeds.
11 professional oboe player in Louisville
12 Weber Reeds
13 I want my students to play on my reeds at first
14 myself and others
15 Good Tone Guild, Midwest, Nielsen
16 I have two sources I use
17 As above, Frosh/Soph get my reeds for free.
18 Hard to find a reliable source. This varies.

16. Do you use a reed-making manual in your teaching?

Yes	31	29%
No	33	31%
Sometimes	30	28%
Rarely	11	10%
Additional Comment	18	17%

1 my handouts
2 I have several reed books that I lend out.
3 I do refer them to some published information
4 I don't generally- but I make books available.
5 My own Syllabus
6 booklet created by Peter & Elizabeth Hedrick
7 Webber book, Jay Light book
8 Jay Light's book on reed making occasionally.
9 my handout
10 I have my own handouts
11 It is a resource, not a textbook.
12 We look at several sources for reference

13 Jay light reed making
14 I recommend reading as many manuals as possible
15 Weber
16 By manual I mean Martin Schuring's website.
17 Hand outs I've created.
18 all available

17. Do you write your own reed making materials?

Yes	74	72%
No	29	28%
Total	103	100%

1 It's available online.
2 I have mostly compiled materials from pervious sources. I intend to write my own version soon.
3 I have a short handout that I give to all the students.
4 Although I do use Martin Schuring's measurements handout, I have "tweaked" them a little
5 I just have a lot of information posted all over the studio. Nothing formal.
6 I give them measurements and diagrams
7 Just lots of comments in the individual reed making lessons each week.

8 I also use Making Oboe Reeds by Joe Shalita
9 However, I do encourage them to read other written sources available
10 In the form of a notebook each student is required to maintain. We (student and teacher) both contribute.
11 and I also refer to David Weber's reed making book.
12 I supply some materials that I have written. I haven't written all of the materials which I distribute.
13 In the beginning of each school year, I do a 2-hour demo for new students from choosing cane up to tying. They take notes and that is the "material". I go through my philosophy of incredible meticulousness in reed making in every step.
14 I have a two page guide to the basics of reed-making
15 but only as a "workbook" which is in addition to printed materials
16 I use a series of step-by-step, diagrammatic flow charts for all stages of the reed making process.
17 Mostly in the form of diagrams.
18 I have created a PowerPoint document with photos and instructions that describe the beginning steps in scraping a reed.
19 handouts
20 Sometimes

18. Do you recommend particular web sites for their reed making content?

Yes	31	30%
No	45	43%
Sometimes	18	17%

Rarely	12	11%
Additional Comment	5	5%

1 ASU - Martin Schuring
2 Martin Schuring and ASU website
3 Martin Schuring's
4 I like Martin Schuring's at ASU
5 Martin Schuring

19. Do you recommend particular articles about reed making?

Yes	37	35%
No	23	22%
Sometimes	32	30%
Rarely	14	13%
Additional Comment	1	1%

1 I may in the future.

Questions about your own reeds
Cane Preparation

20. What in your opinion are the most common problems of the young reed maker?

1 Keeping the knife sharp, and being careful.
2 They are looking for a "magic bullet" The only solution is a good patient teacher and the creation of many reeds.
3 Difficulty in creating a structurally stable blank; skill in finishing the tip
4 General Issues: concentration, knife control, patience, attitude, lack of time prioritization. Reed specific issues: maintaining balance of strength and vibration, tip finishing, keeping the reed "round"
5 Quality control of the reed blank.
Measurements, balance issues and detailed refinement of the tip.
6 Making a tip.
7 Knife technique. Just getting the right amount of cane to come off the intended places. Then, confidence to actually finish the reed.
8 Young reed makers tend to worry too much about ruining the reed. They often don't scrape enough on the tip and take too much from the back.
9 Wrapping, being in too much of a hurry, not doing it consistently enough to get a real feel for the tools and coordination of it all
10 They expect immediate results and get discouraged, and don't spend enough time on the craft.
11 Consistency! Most young reed makers do not allow the time needed to really learn the art of reed making. I find most students get frustrated with a particular aspect of reed making and tend to stop there.
12 Developing consistency
13 getting frustrated with the process and how long it takes to get a good reed
14 Knowing how much to scrape and how to maneuver the knife is hardest, but some of them struggle with tying, too.

15 Inconsistency and paying careful attention to detail. The most important thing about reedmaking (besides keeping your knife sharp) is being consistent.
16 I believe most young reed makers would benefit from placing a higher priority on response and pitch stability rather than the illusion of a "dark" sound.
17 Patience, or should I say, a lack of patience.
A dull knife. Persistence, or a lack of same.
18 The young reed maker most often needs to learn how to produce a well made blank (correct length, no air leaks, straight, not over/under tied) before expecting to produce playable reeds from their scraping technique. The second most common issue is learning proper scraping technique, without undue knife pressure, to be able to make tips thin enough. Thirdly, how to sharpen knives and to take responsibility to keep their own knives sharp enough.
19 inconsistency in tying perfect blanks, inability to finish a reed completely
20 finding the time for both practicing and reed making. being afraid or not knowing when or how to adjust reeds.
21 making decisions about where to scrape
22 1. Afraid to scrape the cane far enough down to let it vibrate sufficiently. 2. Getting enough low harmonics in the reeds. 3.They don't make enough of them to speed up strengthening their knife control.
23 Knife technique; tapering tip sufficiently; lack of use of crow
24 Fundamentals-wrapping the reed, knife sharpening, consistency, time given to reeds.
25 Time

21. How often do you make reeds?

Daily	58	54%
Weekly	30	28%
Every few weeks	11	10%
Monthly	3	3%
Rarely	2	2%
Never	0	0%
Other, please specify	10	9%

1 Average of five days per week
2 When I need to. Sometimes a lot, sometimes not.
3 Maybe two or more a day.
4 Varies greatly, depending on my schedule
5 maybe 3 times a week plus, but not every day
6 Irregularly--more often before a concert.
7 whenever I have time.
8 depends how much performing I am doing
9 depends on season; varies from daily to monthly
10 Varies upon needs and schedule. Daily - Weekly

22. Do you gouge your own cane?

Yes	87	81%
No	13	12%
Sometimes	6	6%
Additional Comment	5	5%

1 Plenty of good sources to purchase it nowadays
2 I used to but now I buy gouged cane
3 I do get some gouged cane -- if consistent
4 I gouge oboe cane, but not EH cane
5 Purchased gouged cane quality has really plummeted

23. If so, which gouger(s) do you use most often?

1 Ferrillo, Wohfeld
2 Graf, Inolledy
3 Ferillo, Graf
4 Kunibert Michel
5 Innoledy, RDG, Jeanne
6 RDG, 11mm blade and 11mm bed
7 Reeds 'n Stuff, RDG, Graf, in that order
8 Ross
9 Jeanne and Graf
10 Ross
11 Dan Ross
12 Ross
13 Dan Ross, although I've ordered an Innoledy
14 Lately I use Robin Driscoll's Opus One machine and I also own and operate Innoledy and RDG machines.
15 Jeanne
16 I use the Innoledy most often, sometimes a Gilbert gouger, and use my brass Graf gouger as a great door stop. :)
17 Ross
18 Gilbert Gouger
19 Ross
20 A Dan Ross machine, but this is a relatively new adventure. I was a dedicated Graf machine user for 15 years.
21 Ross; Innoledy; Michel
22 Ross, Driscoll, Innoledy
23 Reeds-n-stuff
24 Currently I am using a Gilbert machine with a 10.75 blade. For most of my life, though, I have used a Graf machine that I set up.
25 Ross
26 Gilbert
27 Innoledy
28 Dan Ross
29 Sassenburg
30 Ross, Graff

31 RDG
32 Innoledy and Ross
33 Gilbert
34 Currently an Ackerman Graf, but I have also used a Driscoll Op. 1, a Dan Ross, and an Innoledy gouger.
35 RDG and Kunabert (sp?)
36 Dan Ross gouger primarily. I have others that work pretty well - Innoledy - but the Ross is the most consistent and reliable for me.
37 Ross
38 Ridilla gouger, and RDG gouger
39 Ferrillo gouge
40 Ross
41 Graf
42 Ross
43 Ross, Innoledy and Ferrillo
44 Graf
45 Ross
46 Robert Gilbert's gouger, and one I designed and built myself which is even more precise in its adjustments.
47 Innoledy
48 Ross
49 Gilbert, Driscoll
50 Opus 1 machine, by Robin Driscoll, and a Graf set up by David Weber.
51 Ross gouging machine.
52 Ross and Innoledy
53 Opus 1 by Robin Driscoll is my favorite.
54 Innoledy, Rieger, Hand gouging with a Japanese round chisel
55 Ross
56 Opperman
57 RDG with a 10mm bed and blade
58 Dan Ross
59 Graf, Dan Ross
60 Graf and Jeanné
61 Gilbert.
62 Ross gouger
63 Graf set up by David Weber
64 Innoledy
65 Graf
66 I used a Kal Opperman for years
67 GILBERT
68 Graf
69 RDG
70 Dan Ross
71 old Graf machine
72 Graf
73 RDG

74 Innoledy, Ross and Gilbert
75 Ross
76 Weber.
77 Ross
78 Ross and Innoledy. My Michel is not working now. I regret having sold gouging machines and I wish I could afford more of them.
79 Graf
80 Inolledy
81 Innoledy, Ferrillo, Graff, RDG
82 Innoledy, Gilbert
83 rdg
84 graf, gilbert, innoledy
85 Innoledy and Gilbert
86 Robin Driscoll's OpusOne
87 Ross
88 Dan Ross Gouging machine
89 Gilbert
90 varies
91 Innoledy, Ross

24. Do you know the setting of your gouger? (side vs. center thickness, etc.)
1 Yes
2 59 center 30 side
3 .60 in the center, .48 at the sides where the ears join the curve of the shape
4 yes
5 Yes - .60 in the center, .45 on the sides
6 Yes. .60 in the center. About .10-.12 thinner at the widest part of the shape.
7 Yes
8 .60-.55
9 center - 57-58, sides 47-48
10 57 in the middle
11 Yes - I aim for 58-60 center, 45 side.
12 center is .58-60
13 Yes
14 yes
15 Yes---center thickness is .59, side thickness is usually .48
16 Yes.
17 yes
18 Yes
19 .58 x .46 approximately
20 c. .59-.48
21 yes
22 Yes. On the Gilbert machine there is an 11 difference, center to side.
23 58 center, 48 sides
24 standard Glbert measurements

25 47-60-47
26 60 middle/ 46 sides
27 About .045 on sides to .060 center
28 No
29 sides = 45-46 and center is 59-60
30 45 vs 60
31 .62 center
32 60-54-50ish Center, ribs, side
33 .6 center. Sides depend on blade/cane diameter ratio but about .45-.48
34 Yes. Center would be 58 and side about 50.
35 Sides: 45-50Center: 58
36 +- 60/45
37 Side 47-48 mm, Center 60 mm
38 58 in center, 48 sides
39 center 58-60, sides 48
40 .58 center
41 I know when it works it is correct.
42 Yes (57/50)
43 Depends on the cane, but nominally 45 - 60
44 .45 at the sides, .58-.60 in the center
45 No
46 .58-.60 at center; .45-.48 at sides
47 yes, about .58 center, .47 side
48 Yes: .60-.61 center, .47 at sides of shaped piece.
49 Yes.
50 yes
51 My current gouge is about 59 in the center, and goes to about 40 on the sides.
52 My gouge varies, since cane is living being, so I do not see any valid point of keeping them too consistent, although I stick to somewhere bet. .58 - .62 for the center. Corner varies. (Rieger is thinner, iNnoledy is thicker.)
53 yes
54 60-45
55 yes
56 Yes
57 Yes
58 48" sides; 60" center
59 Yes.
60 69 center, 65 sides
61 63 MM in the center; 48 mm on the sides. I use this thicker gouge for the frigid MN winter
62 60 48
63 60,45
64 yes
65 yes. .48 / .6
66 60mm in center, 47mm in sides

67 Yes, 45-58
68 Yes
69 60-48
70 .60 center.47 sides
71 .58 in the center; side measurement is irrelevant for the Ross machine.
72 Ross- 58-50, Innoledy-61-47
73 yes
74 60, 45
75 .60x.58
76 Yes
77 yes
78 60mm-48mm
79 yes. ranges from .58-.61 in the center and about .48 on the sides
80 .60 at the center, roughly .45 on the sides
81 58 center, 40 sides
82 yes
83 Center is 60, Sides 45
84 60-47 is preferred
85 No

25. Do you usually buy cane from one or multiple venders?

one main vender	31	29%
multiple venders	75	70%
Other, please specify	5	5%

1 The best cane regardless of vendor
2 Try others here and there
3 Rigotti, Ghys, Tong Cui
4 Loree cane, from Midwest Musical Imports
5 I have so many boxes of cane from my youth that I

26. What are your thoughts about aging cane?

I use cane relatively soon after purchasing it	32	30%
I use cane within a year of purchasing it.	26	25%
I use cane within five years of purchasing it.	17	16%
I don't think about aging my cane, however most of it is over five years old.	14	13%
I deliberately age cane.	7	7%
I use good cane and let the bad age.	28	27%
I don't consider these variables.	18	17%
Other, please specify	19	18%

1 I do all of the above! I have a lot of tube cane
2 The grower ages, aging will make soft can harder
3 I have and use cane purchased every year from 1975
4 I usually have to use what I have available.
5 I am using an aged batch now- it is awesome...so??
6 I try the cane right away-if it works I use it

7 I vary this process.
8 I prefer cane 20 or more years old.
9 But I also have older cane I get out now and then.
10 It varies. I try it when new AND let it sit
11 I have enough tube cane to last until I am 240
12 I experiment with new and old cane.
13 I use a variety of aged and newly purchased cane.
14 If it looks good and not green, I use it.
15 I have hundreds of pounds of cane and use maybe 5%
16 All of the above
17 I try to only buy cane that works without aging.
18 I use up the good batches and let bad sit 4ever
19 this depends as old cane sometimes gets very hard

Tying

27. Which brand(s) of staples do you use?

1 Pisoni, Nielsen, Stevens
2 Sierra, MCW
3 Stevens #2
4 Gilbert's cheaper brass staples with a narrow, oval-shaped opening; they are more oval than round
5 Coelho, RDG, Chudnow and others.
6 Sierra, Stevens and MCW silver solid staples
7 Stevens. Thinwall brass, #2, 46.5 mm
8 Sierra
9 Pisoni Artist 47mm silver
10 Loree AK, others I have on hand
11 Glotin & Stevens
12 Chudnow
13 Primarily Chudnow
14 Sierra brass
15 Stevens pro thin brass
16 Glotin silver
17 Stevens #2 work best for me.
18 Chudnow all-metal and Sierra
19 various
20 Rigoutti Silver,47mm
21 Sierra
22 Nielsen, silver, 47mm, large.
23 Stevens
24 Stevens, sierra
25 Glotin
26 Pisoni and Stevens.
27 Nielsen small, silver, 47 mm
28 Loree

29 Chudnow - the new "super" staple style, brass or silver
30 Chudnow
31 Steven's 3
32 I have tried Chudnow and other "high tech", but prefer traditional ones, like Loree or Fox.
33 whatever.
34 Stevens, Sierra, and Chudnow
35 Sierra Bronze/Brass 47 mm
36 Chudnow, E
37 Chudnow CA and Stevens No. 2
38 Chudnow E47
39 Primarily the Rigotti 47 mm silver. I also have some Loree 47 mm.
40 Chudnow
41 MCW
42 Stevens, Sierra
43 Loree AK
44 RDG, Stevens
45 Chudnow, Rigotti, old Loree staples
46 Loree AK; Chudnow E
47 Nielsen medium and Chudnow
48 Loree silver
49 Chudnow
50 Lorée nickel-silver
51 Mark Chudnow (MCW)
52 Loree, Rigotti
53 variety
54 Chudnow Sierra bronze
55 The ones the students have saved from old reeds.
56 Glotin silver 47mm
57 Stevens
58 "CA" staple, by Mark Chudnow.
59 Loreé 47mm, silver
60 Old glotin, and sierra.
61 Pisoni Artist Brass.
62 Guercio D11, D12, MCW, Glotin Nickel silver
63 Sierra, Rigotti, Stevens
64 Loree
65 Loree
66 MCW
67 Stevens
68 Mark Chudnow Sierra
69 Chudnow
70 Rigotti 47 mm brass, Loree 47 mm. brass
71 Sierra, silver tubes. 46mm.
72 Chudnow S
73 Chudnow, Pisoni, Loree Ak

74 Charles tubes, Laubin tubes
75 pisoni glotin
76 Pisioni
77 Chunnow
78 Loree\chudnow \rigotti
79 CA, Sierra, Pisoni
80 Loree AK bore tubes with Nissen wraps
81 Chudnow S and E, Rigotti
82 Mark Chudnow
83 Stevens, Loree
84 MCW
85 Loree
86 Loree
87 weber
88 Sierra
89 Stevens (#2 most often), Pisoni
90 Pisoni Pro (brass, 47 mm)
91 MCW Sierra brass and sometimes the Chudnow's with the o-rings
92 Loree
93 Pisoni, Stephens, Sierra
94 Loree
95 Loree, Chudnow S
96 MCW
97 Loree AK, Glotin, Stevens. If it fits my mandrel I will try it.
98 Pisoni, AK Loree
99 sierra (chudnow) most often, pisoni, glotin
100 Chudnow, sierra
101 Loree, silver, 47mm
102 Chudnow: CA Nickel oboe staple, Chudnow Oboe S Bronze, Nickel, Gold, Silver, Chudnow Oboe E Bronze, Stevens
103 Pisoni, Stevens
104 Chudnow E series

28. If you mentioned more than one brand, do you have a current favorite?

1 Pisoni
2 Sierra brass,with cork not that new o-ring cr##.
3 No
4 no
5 Loree AK
6 I'm trying Stevens right now
7 no
8 The metal ones are my favorite (Chudnow S, I think), but I also use cork staples.
9 Chudnow all-metal
10 loree
11 stevens

12	I like both.
13	Steven's
14	No, but real (not synthetic) cork tubes are a must.
15	I use all for different purposes.
16	see above
17	Someone recommended I revisit the Chudnow, but I'm actually happiest with the Stevens tubes.
18	Rigotti or Loree.
19	Stevens
20	no
21	no
22	No
23	Nielsen medium
24	Loreé
25	no
26	yes, Guercio D11. Unfortunately not available in the US.
27	Sierra silver
28	no
29	Loree Ak and Chudnow
30	both
31	no
32	Pisoni
33	CA
34	Chudnow E tends to be my favorite reeds in the case. The Rigotti are cork wrapped so the reeds can be used on a larger variety of oboes.
35	no
36	Stevens
37	Pisoni
38	Chudnow S
39	Loree AK
40	Pisoni
41	pisoni, as the aperture is a little less open in the humid climate
42	on chudnow, sierra. I've tried others but I go back to him
43	Chudnow CA Nickel
44	mostly Pisoni

29. What length(s) of staples do you primarily use?

46	7	7%
47	98	92%
Other, please specify	4	4%

1	46.5
2	46 and half
3	45, however, I use a particularly long scrape
4	45

30. Would you consider using a different staple length or a different brand of staple?

Yes	48	45%
No	21	20%
Maybe	36	34%
Additional Comment	21	20%

1 Why? Will it improve something?
2 I would consider a different brand, not length
3 "If it ain't broke, don't fix it."
4 I am Mark Chudnow's corkless staples (still 47mm).
5 No to different length. Yes to different staples.
6 depends on which oboe I'm making reeds for
7 Brand only.
8 Different brand (yes) different length (no!)
9 47 really works well for me.
10 If I needed to adjust the length for pitch issues
11 I also use 46, 45 length
12 I'm always open to something better!
13 Probably not.
14 not length however
15 Brand yes, length no
16 only if appropriate to specific horn
17 only if there was a specific reason to (ie: pitch)
18 Diff. brand if well made i.e. fit my mandrel
19 if "differnt" were spelled correctly :)
20 Consistency is vital - I avoid shopping around.
21 different brand, but not different length

31. Do you generally use a mandrel when tying reeds?

Yes	104	98%
No	2	2%
Total	106	100%

View 12 Responses

1 Always
2 Absolutely!!!!
3 I have big hands. It depends with my students, but usually always.
4 Not generally but ALWAYS. I don't see how you can be consistent if you don't.
5 I have never tied a reed without a mandrel.
6 I have a few for my favorite staples, but I never use them. I use them only to see the condition of the taper of a staple or to true it, not to tie. It was a template to make a staple to start with anyway. I have made a few stapes by using a mandrel.
7 I never work without a mandrel
8 always!
9 ABSOLUTELY
10 Yes
11 always

12 I don't think this is absolutely necessary. This depends on hand comfort and everyone is different.

32. Do you generally measure the total length when you tie a reed?

Yes	101	94%
No	6	6%
Total	107	100%

View 10 Responses

1 The reed is tied on as long as possible. In other words, the reed should seal just above the string with one wind still possible before exceeding the end of the staple.
2 I consider the length very important for a particular shape.
3 depends on the shape
4 Absolutely. I measure several times during the process of tying each reed.
5 I place the cane on the tube so that it looks correct and then measure. If it falls between 72 and 73.5, I tie it where it closes evenly and the throat looks correct.
6 The tie-on length is a function of the width of the shape and the diameter of the top of the tube. The length will change with different shapes or tubes. I find the correct length by trial and error the first time, then measure from the fold to the top of the wrap, marking that distance on subsequent pieces of the same shape.
7 but it varies. just to see where I stand, not to keep them same.
8 73 m.m.
9 always
10 I do know the total length, but no longer need to measure.

33. If so, what is the total length of your tied reed?

1 Depends on the shape
2 43.5 Joshua +4, 42 Brannen X
3 Depends entirely on the shape
4 74mm
5 73mm
6 73
7 Following the above guideline, usually about 72mm.
8 72.5
9 71-72mm
10 73ish
11 72 & 1/2
12 73 mm
13 72mm
14 Around 73 mm
15 72
16 The total length depends on the shaper tip I'm using at the time and is one variable I change often.
17 72mm

18 73 mm
19 Blank = 74
20 73-74mm
21 74 mm
22 74mm
23 72mm
24 Depends completely upon relationship of staple and shaper tip.
25 as long as possible
26 73-74mm
27 This is determined by the thickness of the staples and the particular shape. I use a Nagamatsu 1. On the Pisoni's I tie at 72.5 and on the Stevens' 73.
28 72.5
29 71 mm
30 72-73
31 72-73, depending on the shape
32 72mm
33 72
34 73 using the Adam joshua +2 shape and 71.5 using the Jeanne shape
35 Generally 72mm. It depends on the shaper tip.
36 72.5
37 72.5mm (for a Joshua +2 tip)
38 73mm with Mack-Pfeifer shape
39 Lately it is about 74 and a half. But, of course, this answer is completely dependent on the shaper dimensions. So it is silly to compare this without the shaper.
40 72-73
41 71mm
42 72 1/2 mm
43 72mm
44 73mm
45 74
46 71 mm
47 73mm
48 72-73
49 73 mm
50 74-75mm
51 73 mm
52 74mm with Coelho shape
53 71mm
54 74mm
55 73.5
56 72mm (maybe a hair under).
57 72mm
58 Depends on the shape I use, but between 72 and 73 1/2 mm
59 Generally, I tie to about 72 mm. long.
60 usually somewhere between 72mm - 74mm

61 73 mm
62 73.5 mm
63 72
64 73 mm
65 71 (45mm staples)
66 73 mm
67 72.5
68 blank: 72.5 (Pf.Mack tip)
finished: 69 mm
69 I base my total (tied) length on the particular shape that I am using. For my current shape, Gilbert-1 (the older version) I tie my reeds to 72.5mm (this is with a 46 mm tube. For a 47 mm tube, I tie to 73.5mm)
70 around 73
71 72MM
72 72.5 mm
73 72
74 73 m.m.
75 73 mm
76 70mm
77 72.5-73
78 74 mm on a pfieffer mack or RDG -1 shaper tip
79 72-72.5 mm
80 73mm
81 72mm
82 72-73
83 74 mm
84 72.5
85 72mm
86 73
87 73 Spring/summer/fall
72.5 winter
88 Between 72 and 73 mm (72.5 is the target)
89 It depends on the shape. The shape and tie length go together. I use a Jeanne Medium at 73, a Mack+ from RDG at 72 and the same Mack+ extended to the top of the ears tied at 73.
90 72.5
91 73
92 74 mm for a 47 mm tube
93 73.5
94 72.5
95 72mm
96 72-73 mm
97 73mm
98 It depends on which shaper I am using, but if I to say one length, generally 73mm
99 73

100	70-71mm
101	73 mm
102	generally 73
103	73.5

34. Do you purposely slip or overlap the blades of your reeds as you tie?

Yes	88	83%
No	18	17%
Total	106	100%

1	I tie left-handed.
2	Very slightly.
3	But, if they're not sitting together well, I will slip them as I tie.
4	And I'm not sure that I like doing that! It often makes too much overlap so I've been experimenting lately
5	Slightly!
6	But as little as possible. And that is very important to be consistent with that.
7	a LITTLE
8	I try hard to avoid slipping the cane, since this decreases the size of the chamber and, in my opinion, reduces the resonance of the reed.
9	This is one of the many things that American oboists blindly keep doing WITHOUT KNOWING WHY. There is absolutely no scientific reason for slipping. If the reed works with it, that's great, if not, get rid of it. It is RIDICULOUS that many say it is absolutely necessary. THE OBOISTS IN THE REST OF THE WORLD DO NOT SLIP THEIR REEDS! ONLY IN THE US!
10	very slightly
11	always
12	no, but I do overlap.

35. If so, in which direction do you make this slip?

back blade to the left	77	82%
back blade to the right	10	11%
either way	2	2%
Other, please specify	20	21%

1	left-handed
2	top blade to the right
3	I slip the blade facing me to the right
4	I tie left handed (string in left hand).
5	Top overlaps bottom when held sideways.
6	Depends on which hemisphere you live in.
7	I'm a lefty
8	Facing blade moves towards the dominant hand
9	Always the same way. Must be consistent there.
10	Pending L or R hand tie
11	I tie holding thread in my RH, and tie "overhand".

12 .....or try not to slip...
13 opposite the tie
14 I slip it to the left, for a left hander.
15 in the opposite direction of the tie
16 I am right handed
17 opposite side of the "crossover"
18 I am left handed.
19 because I'm right-handed
20 For me this is determined by handedness.

36. Which of the following do you use to tie reeds?

Nylon string FF	88	82%
Nylon string EE	15	14%
Silk	9	8%
Floss	0	0%
Other, please specify	10	9%

37. When tying, do you tie to the very top of the staple or just below? (i.e. with a 47mm staple do you tie exactly to 47 or stop at 46.5)

I tie as close as I can to the top.	75	70%
I deliberately stop tying .25 of a mm or more from the top.	12	11%
As long as I don't wrap over the top, I am content	25	23%
Other or additional comments	7	7%

1 even slightly thicker nylon then above
2 occasionally nylon FF
3 Upholstery thread. Other rod winding thread.
4 polyester
5 upholstery thread
6 braided & waxed Santo Domingo heishe thread
7 I consider FF and EE equally suitable
8 A huge spool of 138 thread from a thread company
9 Omega no.2
10 I've used them all. Does it matter?

Scraping

38. Which of the following knives do you most commonly use?

double-hollow ground	87	81%
beveled	28	26%
razor	12	11%
don't know	0	0%
doesn't matter as long as its sharp	10	9%
Other or additional comments	4	4%

1 beveled for tip, razor f. the back
2 Swiss army knife
3 I use all of these types of knives

4 Start with beveled, then razor, dhg for tip only

39. Do you encourage the use of measurements for different sections of the reed in your teaching?

Yes, all the time	62	57%
Yes, most of the time	22	20%
Sometimes	13	12%
Rarely	7	6%
Never	3	3%
Other, please specify	8	7%

1 Students need specifics as they are learning
2 Scrape for how it plays, not for how it looks.
3 Beginning reed makers need dimensions at first
4 I encourage the tip starting between 65-66 mm.
5 this only works if we all have the same set up.
6 I use measurements as a reference not a rule
7 This box is too small to explain.
8 Tip starts in a specific place, the rest is free.

40. Do you encourage the use of a micrometer during the scraping process?

Yes	19	18%
Sometimes	15	14%
Rarely	16	15%
No	58	54%

41. How important is it to have a visible spine in your reed?

not at all important	4	4%
somewhat important	17	16%
very important	37	35%
essential	48	45%
Total	106	100%

42. How important is it to leave bark on the sides (rails) of the reed?

not at all important	3	3%
somewhat important	15	14%
very important	44	42%
essential	44	42%
Total	106	100%

43. When finishing a reed, referring to your last few scrapes, which section are you MOST LIKELY to scrape?

Tip	70	65%
Heart	15	14%
Back	9	8%
I have seen no patterns in my reed making	5	5%
Other, please specify	15	14%

1 Then, I determine what needs to be scraped or cut.
2 Obviously it varies.
3 It is always different. It depends on the needs..
4 Blend of heart to tip
5 Transition from heart to tip & sides of arrowhead
6 Tip scrape, ending with a clip
7 whatever it needs, could be any of the above.
8 Depends on what it needs in order to crow a C!
9 Transition between tip and heart
10 really depends on the cane & individual reed
11 Varies from reed to reed
12 I usually end with a clip.
13 heart into tip
14 whatever section still needs scraping
15 depends on reed

44. Which of the following statements would you agree with concerning the heart? Check all that apply

I try to leave the heart as thick as possible	28	27%
I prefer a longer thinner heart.	24	23%
I prefer a shorter thicker heart.	30	29%
I leave bark on the sides of the heart	33	31%
I leave a spine through the heart	58	55%
Additional Comment	23	22%

1 This depends on the crow
2 There is not space to clarify my answer.
3 Scrape as the reed requires.
4 I don't like a tuddy reed!
5 These are vague statements and vary greatly by obo
6 Since this is a "balancing point" so all the above
7 Any of the above, if necessary to make function
8 I leave the heart fairly thick
9 Depends on needs of the reed.
10 Varies depending on the cane
11 The Plateau is a reduction of the gouge.
12 Heart varies in thickness depending on cane
13 The spine is usually only visible through light
14 Balance is essential; some var. are possible
15 None of the above. I prefer a medium-sized heart.
16 My heart is 4-5 mm long
17 These options are too generalized
18 I measure 30 mm for the heart
19 None of the above - whatever works
20 You can scrape off but not out of the heart
21 The spine is there, but not very defined
22 Heart rises from the back and tip, but not thick.

23 45 mm in center sloping to 40 mm channels

45. How much of the reed do you scrape before opening the blades?

The tip only	28	26%
The tip and the heart	21	20%
The tip, heart and back	55	51%
Other, please specify	9	8%

1 Just a long scrape, though...no real definition.
2 Lots of tip, mostly bark on rest
3 But less in the back, of course.
4 Just a bit to get the bark off the whole reed
5 Tip & channels, no diff between heart & back yet
6 Tip - not too thin yet
7 Depends on how open the blank is
8 The tip, and a long back all the way up to the tip
9 Tip and back

46. When initially clipping the tip, what is the resultant length of the reed?

I clip the smallest possible amount in order to open the reed.	48	45%
I break the reed open with my plaque.	12	11%
I clip a millimeter or two from the total length.	29	27%
I clip the reed to a length close to my finished length.	15	14%
I don't measure this	9	8%
Other, please specify	2	2%

1 Lately I have been clipping about 1/2 mm longer.
2 first day scrape is clipped at approx. 71mm

47. When clipping the tip, do you deliberately clip one blade shorter than the other?

Yes	63	59%
No	35	33%
Other, please specify	11	10%

1 Often, not always
2 Only when finishing, not to open it at first
3 Sometimes - I go back and forth
4 Sometimes
5 Sometimes - most often, though
6 Sometimes, depending on how the reed is vibrating.
7 Not at first, but usually do later
8 Only as a finished step.
9 Sometimes
10 Usually, but not always, and the angle varies.
11 Depends on the behavior of the reed.

48. If you answered yes to the last question, what criteria do you use to decide which blade should be shorter?

Does not matter	23	34%

The weaker blade should be shorter	12	18%
The stronger blade should be shorter	2	3%
Other, please specify	35	51%

1 This also depends on the crow
2 Decide which way it plays best, clip bottom short
3 the bottom blade should be shorter
4 The shorter blade will go on my lower lip
5 The side with the crossover is shorter
6 The blade that will rest on my bottom lip
7 The side with the string cross over.
8 The bottom blade is the shortest
9 The "uglier" tip gets clipped more.
10 Not sure what weak and stronger blade means exactly
11 I clip the blade on the thread cross-over shorter
12 the more curved blade is shorter
13 The short side is the cross-over side
14 The shorter blade is in line with the string knot.
15 Shouldn't be a weaker or stronger blade
16 String crossover side is shortest
17 Shorter tip on top.
18 The bottom blade should be shorter
19 I keep both blades equal
20 Blade with the cross over on the wrap.
21 Blade sitting on the bottom lip must be shorter
22 Upper blade shorter
23 Always the weaker blade is shorter!!
24 Where the string overlaps, that blade shortest
25 Blade on my lower lip should be shorter
26 The blade for the bottom lip is shorter
27 Side with the knot at the bottom is shortest.
28 Cut thread cross over side always
29 Top blade is shorter
30 The lower blade should be shorter.
31 The side with the overlap from tying
32 The blade facing me as I play should be shorter
33 The outer blade longer
34 The shorter blade rests on my lower lip.
35 Short blade is crossover side , or if weaker blade

49. Do you deliberately scrape one blade differently from the other based on any specific criteria?

yes	0	0%
no	105	97%
sometimes	3	3%
In the following case(s):	1	1%

1 Well, not if I can help it

Philosophies

50. I frequently experiment with new scrapes while making reeds.

Strongly agree	5	5%
Agree	9	8%
Somewhat agree	32	30%
Somewhat disagree	19	18%
Disagree	32	30%
Strongly disagree	10	9%
Total	107	100%

51. I frequently experiment with new shapes.

Strongly agree	7	7%
Agree	5	5%
Somewhat agree	25	23%
Somewhat disagree	21	20%
Disagree	38	36%
Strongly disagree	11	10%
Total	107	100%

52. I encourage my students to use the equipment I use.

Strongly agree	12	11%
Agree	36	34%
Somewhat agree	49	46%
Somewhat disagree	7	7%
Disagree	1	1%
Strongly disagree	1	1%
Total	106	100%

53. I encourage my undergraduate students to experiment with different shapes.

Strongly agree	5	5%
Agree	27	25%
Somewhat agree	38	36%
Somewhat disagree	18	17%
Disagree	15	14%
Strongly disagree	3	3%
Total	106	100%

54. I encourage my graduate students to experiment with different shapes.

Strongly agree	14	14%
Agree	32	31%
Somewhat agree	33	32%
Somewhat disagree	2	2%
Disagree	3	3%
Strongly disagree	1	1%

Not applicable	17	17%
Total	102	100%

55. I frequently experiment with new gougers when making reeds.

Strongly agree	6	6%
Agree	5	5%
Somewhat agree	11	11%
Somewhat disagree	12	12%
Disagree	39	38%
Strongly disagree	30	29%
Total	103	100%

56. I consciously consider humidity while making my reeds when at home.

Strongly agree	19	18%
Agree	26	25%
Somewhat agree	18	17%
Somewhat disagree	13	12%
Disagree	24	23%
Strongly disagree	6	6%
Total	106	100%

57. I consciously consider humidity while making my reeds when traveling.

Strongly agree	24	23%
Agree	39	37%
Somewhat agree	20	19%
Somewhat disagree	6	6%
Disagree	12	11%
Strongly disagree	4	4%
Total	105	100%

58. I consciously consider altitude while making my reeds when at home.

Strongly agree	17	16%
Agree	20	19%
Somewhat agree	13	12%
Somewhat disagree	13	12%
Disagree	26	25%
Strongly disagree	17	16%
Total	106	100%

59. I consciously consider altitude while making my reeds when traveling.

Strongly agree	49	47%
Agree	33	32%
Somewhat agree	13	12%
Somewhat disagree	3	3%
Disagree	3	3%
Strongly disagree	3	3%

Total	104	100%

60. I consciously consider barometric pressure while making my reeds when at home.

Strongly agree	8	8%
Agree	16	16%
Somewhat agree	19	19%
Somewhat disagree	9	9%
Disagree	27	27%
Strongly disagree	21	21%
Total	100	100%

61. I consciously consider barometric pressure while making my reeds when traveling.

Strongly agree	10	10%
Agree	18	18%
Somewhat agree	16	16%
Somewhat disagree	14	14%
Disagree	21	21%
Strongly disagree	20	20%
Total	99	100%

62. I often use a different diameter cane when traveling.

Strongly agree	4	4%
Agree	6	6%
Somewhat agree	20	20%
Somewhat disagree	11	11%
Disagree	33	33%
Strongly disagree	26	26%
Total	100	100%

63. I often use a different length staple when traveling.

Strongly agree	0	0%
Agree	1	1%
Somewhat agree	2	2%
Somewhat disagree	11	11%
Disagree	44	44%
Strongly disagree	43	43%
Total	101	100%

64. The crow of a reed is very important to me.

Strongly agree	56	53%
Agree	38	36%
Somewhat agree	10	9%
Somewhat disagree	2	2%
Disagree	0	0%
Strongly disagree	0	0%
Total	106	100%

65. The color of the cane is very important to me.

Strongly agree	10	9%
Agree	30	28%
Somewhat agree	39	37%
Somewhat disagree	15	14%
Disagree	8	8%
Strongly disagree	4	4%
Total	106	100%

66. The tightness of the grains of the cane is very important to me.

Strongly agree	33	31%
Agree	34	32%
Somewhat agree	31	29%
Somewhat disagree	7	7%
Disagree	0	0%
Strongly disagree	1	1%
Total	106	100%

67. I like to make reeds.

Strongly agree	20	19%
Agree	33	31%
Somewhat agree	27	25%
Somewhat disagree	14	13%
Disagree	9	8%
Strongly disagree	3	3%
Total	106	100%

68. The hardness/softness of the cane is very important to me.

Strongly agree	37	35%
Agree	48	45%
Somewhat agree	17	16%
Somewhat disagree	3	3%
Disagree	1	1%
Strongly disagree	0	0%
Total	106	100%

69. The type of staple I use is very important to me.

Strongly agree	36	34%
Agree	47	44%
Somewhat agree	19	18%
Somewhat disagree	3	3%
Disagree	2	2%
Strongly disagree	0	0%
Total	107	100%

70.The type of staples my students use are not important to me.

Strongly agree	4	4%
Agree	9	8%
Somewhat agree	14	13%
Somewhat disagree	25	23%
Disagree	34	32%
Strongly disagree	21	20%
Total	107	100%

71. I make reeds to address the needs of specific works, e.g. I make reeds that play best in the upper register for works that have a good deal of high playing, or make reeds to play the second oboe part to Dvorak cello concerto, or to manage flutter tongue or multi-phonics?

Strongly agree	18	17%
Agree	36	34%
Somewhat agree	27	25%
Somewhat disagree	10	9%
Disagree	11	10%
Strongly disagree	4	4%
Total	106	100%

72. I am generally happy with my reed making methods.

Strongly agree	19	18%
Agree	59	56%
Somewhat agree	18	17%
Somewhat disagree	6	6%
Disagree	3	3%
Strongly disagree	1	1%
Total	106	100%

73. I consider my reeds to be of higher than average quality.

Strongly agree	22	21%
Agree	47	45%
Somewhat agree	20	19%
Somewhat disagree	12	11%
Disagree	3	3%
Strongly disagree	1	1%
Total	105	100%

74. Additional comments:

1 Good luck! I hope to see the results.
2 We do the best we can given the difficulties reed making presents!
3 Individual reed making is a conglomeration of many different styles and opinions. I believe it is a true art and everyone must find their niche. Good luck with this project.
4 I'd love to see the results of this when you're done!

5 Thanks for the opportunity

6 This is a great quiz. If I had taken it 10 years ago I would have replied differently to the questions about changing shapes and gougers. I used to do it ALL the time. I no longer do. It creates too much madness!

7 It's both a day-to-day and a lifetime challenge. You get better as long as you consistently practice the craft.1-3 a day.

8 I consider my reeds to be better for me than anyone else's. Altitude and climate differences are factors when away from home or on tour. Adjustments in proportions are usual, but your objectives and results stay the same. In general, for me, the best visual indicator of cane quality is that the fibers should be fine, even and close together.

9 You absolutely must be able to crow a C octave. The balance between the higher C and the lower C is critical to producing a very good reed with a full sound that is in tune.

10 It is difficult to generalize. I like to keep as many aspects constant as possible.

11 I strongly believe that consistency is the most important single factor in learning reed making. The more variables you introduce the less you know about which of them caused the results you get. By all means, experiment to find what works, but then stick with that setup until you have sufficient experience to recognize what the different shape or tube or whatever has affected, separate from your knife work.

12 I never met a professional oboist who said: "My reeds are mostly good, I'm usually satisfied". Tabuteau himself was described as constantly miserable over the quality of his reeds. I make a lot of reeds at the beginning of the week (10-12 reeds), and if I get 2-3 that I can use successfully in the orchestra, I consider that pretty good. They all play.....but, what I am looking for is that combination of response, tone quality, intonation, projection, flexibility. Hence, a lot of the reeds I make get thrown out after a few days, if they don't come around, or "break in".

13 I teach oboe reed making, but am a bassoon player and do mostly bassoon reeds. I teach the best way that the students can understand and keep reed-making consistent.

14 will send via email

15 What a fun project! Although I have just retired, I still love reed making.

16 It's hard to say that my reeds are of higher than average quality. Many professionals sound quite good on reeds that do not work well for me. I can not really say that my reeds are better than theirs, but only that my reeds are better for myself than theirs.

17 I am probably a very odd ball in this survey, since I was educated in Japan, where most of the people play German style short scrape reeds, with a teacher who studied in Germany but used American Emerald reeds simply because he didn't have time to make reeds. I still use short scrape reeds more favorably, but can make & perform American style reeds as good as anybody else. I am now in the process of reinventing the entire

oboe reed making concept. So far it's working better than anything I have tried. I am going to write down the procedures and will copyright it soon.

18 I hate multiple choice because things are more complicated. You can call me some time and I'll be glad to discuss my reed making philosophy with you.

19 why not questions about seasons? (I live in NE!!)

20 good questions

21 My teachers were unable to teach me to make reeds. I studied on my own and experimented for years before I could make even a half decent reed.

22 This was great. I enjoyed working through these questions very much. GOOD JOB, Elizabeth!!

23 [Concerning question number] 73. Compared to who? My reeds are always much better than anything my students have purchased except for Laura Schaffer's(sp?).

APPENDIX D: INSTITUTIONS WITH PARTICIPATING RESPONDENTS

Alabama State University
Arkansas Tech University
Auburn University
Austin Peay State University
Ball State University
Bard College
Baylor University
Blair School of Music at Vanderbilt University
Boston University
Bowling Green State University
Brown University
California Lutheran University
California State University- Chico
California State University- Fullerton
California State University- Los Angeles
Campbellsville University
Chapman University College
Cincinnati Conservatory of Music
College of the Canyons
Colorado State University
East Carolina University
Eastern Kentucky University
Eastern New Mexico University
Emory University
Florida State
Georgia State University
Glendale CC
Hampton University
Hardin-Simmons University
Indiana State University
Indiana University of Pennsylvania
James Madison University
Juilliard School
Kean University
Lehman College CUNY
Lipscomb University
Luther College
Minnesota State University- Mankato
Missouri State University
Montclair State University
Morehead State University
New England Conservatory

Northern Arizona University
Oberlin College Conservatory
Ohio University
Oklahoma State University
Portland State University
Rhode Island College
San Diego State
San Francisco Conservatory of Music
San Jose State University
Southern Illinois University
Southern Methodist University
Southwestern Oklahoma State University
Stanford University
Stephen F Austin State University
SUNY Fredonia
Towson University
University of Akron
University of Alabama
University of Arkansas
University of California- Davis
University of California- Santa Cruz
University of Central Arkansas
University of Central Missouri
University of Central Oklahoma
University of Colorado at Boulder
University of Florida
University of Illinois
University of Massachusetts
University of Memphis
University of Miami (Florida)
University of Missouri-Columbia
University of MN- Duluth
University of Montana-Missoula
University of Nebraska - Lincoln
University of Nevada Reno
University of Nevada- Las Vegas
University of New Mexico
University of North Carolina- Chapel Hill
University of North Carolina- Pembroke
University of North Carolina- Greensborro
University of Rhode Island
University of South Florida
University of Southern California
University of St. Thomas
University of Utah
University of Virginia

University of Wisconsin- Eau Claire
University of Wisconsin-Milwaukee
University of Wisconsin-Stevens Point
Washington State University
West Chester University of PA
Western Connecticut State University
Western Illinois University
Western Washington University
Wichita State University School of Music
Willamette University
Winthrop University

APPENDIX E: PARTICIPANTS

Heather Armstrong
Stacey Berk
Caterina Bristol
Nancy Clauter
Lynne Cohen
Donna Conaty
Theresa Delaplain
Doris DeLoach
Pedro R. Diaz
Michael Ericson
Christa Garvey
Jennifer Grice
Michinobu "Mitch" Iimori
Michele Kirkdorffer
Jacqueline Leclair
Andrea Lenz
William McMullen
Shelly Meggison
James A. Moore III
Denise Plaza-Martin
Elizabeth Young Rennick
Susetta Rockett
Laura Ann Ross
Michael Schultz
Leslie Starr
Jeanette Zyko,
Michael Adduci
Laura Ahlbeck
Amy Anderson Anderson
Andrea Banke
Ashley Barret
Fredric Beerstein
Bill Bennett
Edward Benyas
Rachel Brudnoy
Stephen Caplan,
Tracy Carr
Stephanie Caulder
Timothy Clinch
Fredric T. Cohen
Stephen Colburn
Amy Collins
Allan Comsotck
Peter Cooper

Lara Saville Dahl
John Dee
Mark DuBois
Lorraine Duso
Susan Eischeid
Phil Feather
Michele Fiala
Nat Fossner
Ken Futterer
Chris Gibson
John W. Goodall
Holly Gornik
Henry Grabb,
Erin Hannigan
Jared Hauser
Marsha Heller
Spring Hill
Aaron Hill
Alan Hollander
Stuart Horn
Robert Hubbard
Eugene Izotov
Celeste Johnson
Ann Knipschild
Cecile Lagarenne
Nora Lewis
Cynthia Green Libby
Martha Lindberg
Susie Lundberg
Margaret Marco
Jonathan Marzluf
Sheri Mattson
Keri E. McCarthy
Roger McDonald
Katherine McLemore
Amy Mendillo
Jessica Bailey Miller
Patricia Emerson Mitchell
Gary Moody
Jane Murray
Bo Newsome
Leslie Odom
Eric Ohlsson
Mark Ostoich
Dewayne Pigg
Jennifer Potochnic

Deanne Renshaw
Laura Reynolds
Dan Ross
Rebecca Scarnati
Martin Schuring
Phylis Secrist
Paul Sherman
Mark Snyder
Diane Soelberg
Harvey J. Stokes
Karen Strand
Joyce Teghtmeyer
Hollis Ulaky
Laurie Van Brunt
Kevin Vigneau
Michelle Vigneau
John Viton
Robert Walters
Cynthia Watson
Jennifer Weeks
Robert Weiner
Dan Willett
Bill Woodworth

APPENDIX F: RELATED LITERATURE

In preparation for selecting appropriate and meaningful questions for the survey a vast amount of related literature was explored. Literature concerning the oboe reed can be divided into four categories: articles concerning the making of historical reeds, how-to guides for beginning and advanced students, research concerning cane and reviews of reed-making practice obtained by survey or interview. This last category is of particular relevance to this study.

Survey Based Reed Research

There are two significant works which fall into the category of survey based reed research:

Ledet, David A. *Oboe Reed Styles: Theory and Practice.* Bloomington: Indiana University Press, 1981.

This work was discussed more fully in the background section of this proposal. It contains pictures of 89 reed samples from oboist around the world. Among other objectives, it establishes the state of reed making of prominent oboe players during the 1970's

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

This work has had much more limited circulation than Ledet's research. It is a compilation of survey results from a survey about various aspects of oboe teaching including items from repertoire to reed making. It was conducted in the mid seventies. The questions included are open-ended and the number of respondents is relatively small. Respondents were invited to include diagrams in their responses.

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