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## FINDING

*Beginning the apprenticeship.* Search for an apprentice or master. What does it mean to be a master or apprentice? Investigating schools, institutions, and exhibitions for apprenticeship. Word of mouth. Guidelines for the interview. Application forms. Testing. Setting goals. Acceptance and trial period. Apprenticeships in other countries.

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*That lyf so short, the craft so long to lerne.*

—Geoffrey Chaucer

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# Warren MacKenzie

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## A Conversation

*I think it best that I speak briefly about the experience that my late wife Alix and I had at the Leach Pottery in St. Ives, Cornwall, England, and of the kind of apprenticeship that we experienced there. When we went to the Leach Pottery in 1949, we had been trained at an art school, as most Leach Pottery apprentices had been. The apprentices at the Pottery were expected to have some skills in throwing, although perhaps not skills which were up to the standards of the Pottery. Alix and I quickly discovered that we did not have the training necessary. It took us weeks to acquire the skills we needed in order to ensure that the pots we made could be sold in the showroom and not evoke criticism of the Pottery.*

*We made only standard ware pots at that time—pots which were designed previously by Bernard Leach, or someone else from the Pottery. The size of the pot, the weight of the clay, and so forth were recorded on a card which the thrower later used to reproduce the pots in batches of one dozen to one hundred, depending on the complexity of the pot, its size, and how many of the pots were needed for the kiln firings.*

*At that time there were five people throwing at the Pottery, with Alix and me as the two apprentices. We cost the Pottery a fair amount of money in the beginning, as we received a minimum wage from the first day we worked there. Eventually our pots came up to the Pottery standards and brought some income. (Many years later we found out that the standard ware pots at the Leach Pottery were not its main source of income; the main income was from the individual ware of Bernard Leach, which was sold at exhibitions for relatively high prices.)*

*Bernard Leach had a separate studio in the Pottery where he worked. We took tea together, mornings and afternoons, and we had discussions then concerning the quality of the standard ware being done. Bernard was seldom in the Pottery for a critique of the things that we were doing, however. David Leach, his son, was in charge of the Pottery at that time, and he was the person who told us whether or not the pots were up to standard. Bill Marshall was the most experienced thrower, and he made the more difficult pots. Bill would sometimes help us with the concepts of the pieces we were attempting to make.*

*When we first went to the Pottery, we were allowed to do individual pots, as the mood moved us. This meant that if you were making a batch of soup bowls and had an idea for a particular bowl you wanted to make yourself, you just did it. It went into the firing and was charged off against what we called our firing allowance. Every person who worked at the Pottery was allowed to use one quarter of a cubic foot of space in the kiln as a firing allowance. If*

the person did not make pots—such as the secretary or bookkeeper or the person who made the clay—he could select any number of the standard ware pots up to the equivalent of a quarter of a cubic foot, and these were given to him free after each firing. If you made pots, the chances were pretty good that you wanted to make your own things and have those placed in the quarter of the cubic foot of kiln space. If you wanted more than that, you paid wholesale rates. Eventually this broke down because David Leach felt that too much time was being taken up on individual ware, and not enough time was being spent on standard ware. To replace this loss, we would come on evenings and weekends to work in the Pottery, and we would save our pots until we had enough to fire in the small kiln available for the students and the workers. We eventually persuaded a group of the throwers to save up all their pots and then have a firing in the large kiln. We rented a large chamber in this kiln from the Pottery, paying all the expenses of the firing.

The work at the Leach Pottery was divided into specific functions. If you were a thrower, you did only throwing. One fellow did only the glazing for the standard ware pots; another made all the clay, and, in addition, packed pots to be sent off by parcel post—a good deal of the Leach Pottery's business was done by mail order.

When it came time to prepare the kiln to be fired, Kenneth Quick and I packed the kiln. It took us two days to pack the large kiln, and at the end of that period the rest of the crew would pitch in and throw pots to be biscuited into the third chamber. Everyone took a turn at firing the kiln, according to a schedule. Bernard also sat at kiln watch, although he did not do standard ware pottery. He had a stake in the kiln, and so he took a kiln watch along with everyone else.

The kiln was a large one, with two glaze chambers and a biscuit chamber; each chamber was 120 cu ft and took approximately thirty-two hours to fire. If you sat with the kiln overnight, you got equivalent time off the next day. At the end of the firing we would usually go to the local pub and get a few quarts of beer, or go swimming in the river. On Saturday morning, everyone pitched in and swept out the Pottery, getting ready for the next week's work.

Alix and I were very fortunate to be able to live in the same house with Bernard Leach. He had separated from his second wife and was living alone, and he asked if we wanted to live with him. I must admit we learned a lot in the private discussions and offhand comments with Bernard. Visitors came and went—artists, critics, philosophers, writers—and many lively discussions took place, discussions in which we were privileged to participate. We learned more about aesthetics in those situations than we did back at the Pottery, where we were confined to making the standard ware.

Having made Bernard Leach (or standard ware) pots for two years, we were indoctrinated with the sense of form that Leach used. It took five or six years after we had returned to the United States before most of that sense of form no longer pervaded my own work. More difficult to get rid of than the sense of form, however, was the indoctrination of Leach's ideas, which I don't want to get rid of. I do





Warren MacKenzie, potter, with apprentice Mike Thiedman

*believe in the ideas which Bernard espoused, and upon which he built his pottery.*

*I see a problem in the whole American concept of being a potter: very few of us are willing to go to someone else's pottery and make their pot shapes. In other parts of the world, this is an accepted and expected practice. In Japan, for instance, an apprentice makes nothing but one pot for several years, until he has mastered that pot, and come up to the master's expectations. I don't know many young Americans who would be willing to do that. I don't know many American master craftsmen who would put the screws to an apprentice to produce an exact form and quality. I am not sure the traditional European or Oriental concept of an apprenticeship is applicable or workable in America. We live, quite simply, in a different time.*

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*When Mike Thiedeman first contacted me, I hesitated before replying to him because I was not prepared to undertake a traditional apprenticeship. Since I teach at the University of Minnesota, and as I am often away conducting workshops, I was hesitant about getting into a master-apprenticeship relationship where I would have to exercise close supervision over a person making my pots. At the same time, however, I thought it might be possible to work out something where there would be an exchange of ideas—where things would rub off, establishing a working ambiance which would be effective for both of us.*

*When Mike came, we decided that he would work one day a week around the studio and relieve me of such things as mixing clay and glaze, and taking care of the odds and ends that always come up while I'm away teaching. When he began making pots for himself, we had informal discussions concerning his pots, both during the making and after a firing. In that respect we relate back to the relationship I had with Bernard Leach; that is, watching Bernard draw a few pot ideas on the back of an old envelope, as he sat at the breakfast table. (That was a much more effective way of getting into Bernard's mind than having his son David criticize our mugs for being the wrong shape.)*

*Mike Thiedeman, Shirley Johnson, and I now have separate firings. Whenever any one of us has the pots ready for a firing, those pots are next in line for the biscuit chamber and also for glaze firing. I find this better for me than sharing the firing with two other people, as it forces me to confront the problem of filling an entire kiln with a variety of shapes and sizes of pots, with glazes that react differently in various temperatures and positions in the kiln.*

*At the Leach Pottery I never paid any attention to how standard pots were glazed; that was done by another individual. It was really a case of not being a complete potter on your own. You were one part of a team, with responsibilities and ideas about the work you did. This raises a problem that relates to apprenticeship: no matter how a pottery is set up, I do not believe it can be run effectively by a group. Group responsibility leads to endless discussion and no action. This occurred at the Leach Pottery when David Leach attempted to reassess the quality of ware. We would get out twenty examples of a dessert plate, for instance, and then talk endlessly about whether this curve was wider than that curve, and which was better—all opinions were supported by strong logic. (Bernard would also be in on these discussions, but in the final analysis it was David who told us what to do.) We had measurements on cards, and biscuit pots were held up as perfect examples. We often questioned whether a pot made five years before was not now a different pot, and if so, whether there was validity in both versions of the piece. There were many private discussions with Bernard about this, but a way to reconcile the individual expressions which seemed so desirable in a pot with the need to adhere to strict conformity with set forms so that there would not be a large number of truly bad pots produced by people seeking their own sense of form was never found. When Alix and I left the*

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*incredible training we experienced at the Leach Pottery, we decided that this would not be the way we would run our pottery. We would seek less mechanical control and more awareness of the vitality of the pot.*

*In the apprenticeship of Mike Thiedeman, therefore, Mike and I have paid little attention to technical questions. Many apprenticeships seem to focus largely on technique, with the intention of producing one specific pot. The emphasis in our relationship has been almost exclusively upon what I might call aesthetic concerns. Those are what I consider most important. Technique, presumably, will come by itself. Why waste a relationship with a master craftsman on something that you can learn as an undergraduate in a university? Apprenticeship provides an opportunity for the young craftsman to come in contact with a working master who has already come to grips with aesthetic issues and can share some of this experience with the apprentice. In the best relationships, both master and apprentice can grow and change. The apprenticeship, furthermore, must deal with the psychological relations between master and apprentice. In a successful apprenticeship, both master and apprentice need a mature sense of what they are doing and why they are doing it; and in the last analysis they both must have an openness, an acceptance, a high level of tolerance, a strong civility, and a deep sense of the awareness of themselves and of other people.*

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## **Toward Humanism in Apprenticeships** *To a Would-be Apprentice*

by John Glick

In this essay I wish to stress the importance of finding a meaningful apprenticeship because an apprenticeship could be one of the most vital phases in a craftsman's growth process. I recognize, however, that all apprenticeships are not created equal.

Perhaps some definitions are necessary before I begin my discussion on apprenticeship. I define a *master* as a craftsman who has achieved a level of expressive and/or technical expertise combined with a depth of experience, who is capable of guiding another person through exploration in the chosen medium. I define *apprentice* as a person actively involved in a working studio, under the direct guidance and influence of a master. An *employee* is defined as a worker who has specified jobs to perform, jobs which usually vary little in scope from day to day. A too casual application of the terms apprentice and employee can cause misunderstandings concerning the process of learning by direct participation in a studio. Too often the label apprentice is applied to almost any job in a studio—possibly to legitimize it. The apprentice candidate therefore must realize, from the beginning of his search for a position, that all openings will not offer the same chances for growth and learning simply because the term *apprenticeship* is used. A good deal of research

and thought by the candidate are necessary before he takes any position; that requires time and care.

It might help to identify some of the general considerations that will have to be examined during the research phase. The master (role model), the studio environment, and the aesthetic climate present are some basic factors that will matter greatly. Naturally, there are people who feel that any apprentice experience under any condition is better than none at all. I do not believe that this is necessarily true. In fact, I favor no apprenticeship at all over one in which the apprentice is never exposed to broad human experiences and values, as well as meaningful studio activity. A prolonged contact with a lifeless job, doing drudgery work for experience, is of questionable value. The fact that such a job experience takes place in a studio setting changes nothing. Often this kind of studio is identified with a poor quality, mass-produced, "handmade" ware geared for a wholesale marketing system. Usually, a line of products and a catalogue are part of the scheme of things.

Such vestiges of real commitment to a craft process in the broad sense are likely to be called by familiar names: studio, craft, apprentice, and so forth. People who take such jobs are apparently seduced by the chance to relate to the superficial trappings of a craft process, but they fail to come away with deep personal, basic skills of the type that will serve them when the time comes to begin on their own. Instead, what is more likely carried away is a license to continue the proliferation of this kind of venture. Sadly, the products and philosophies of any such enterprise are doomed to mimic a poor model and end up by watering down further an already malnourished set of values. The results are readily seen nationwide in hundreds of art fairs and shops.

The idea of selectivity therefore must be central in the approach to your search. I do understand what it means to imagine yourself being particularly selective at this moment, especially when there are hundreds waiting in line for any chance to work in a craft situation. It is the apprentice, however, who stands to lose the most if a poor choice is made. This is your time for learning to absorb and carry away the positive influences you urgently need. The things you care about must be clearly identified and applied as guides as you look at possible apprentice positions. Few people have a chance to correct an unwise choice by finding a better situation later on. Judging the merits of any particular opening will be hard for you as a relative newcomer to the field.

If you accept my premise that there are very few really well-rounded apprentice opportunities, the situation may seem even more extreme. In fact, I may appear to be backed into an idealistic corner on the issue, but these kinds of issues defy clean-cut answers. Obviously, no one can detail a foolproof plan leading to the ideal apprenticeship. I know that part of the entire apprentice concept necessarily involves compromise. The trick is to identify your priorities well enough that when you assess the compromises in a given instance, you can see your chances for survival clearly and then act accordingly. Remember also that while the master you seek has abundant problems of his own, there is still likely to be a continual stream of willing individuals knocking on his studio door who want to relate in any way possible. If you decline to apply to or accept a position,



you deny the master little of value, really. If you take on the responsibility of a position without a deep conviction that it is right for you, then you not only cheat yourself of your own growth, but you offer less than an honest person to the master as a pupil.

Suppose you develop some hopeful leads, despite the competition from the large number of people who continually look for apprentice openings. The following is offered not as an exhaustive guide to all the possible relationships that may be necessary to clarify but rather in the hope that the basic issues discussed stimulate an attitude whereby you perceive yourself as a worthy human being in search of growth entirely deserving of a fair chance to find it. My firm belief is that an apprenticeship based on humanistic considerations is by far the most worthy experience to be found.

### **Reputation, Philosophy, and Attitude of the Master**

The reputation of the master will mean very little when you interact with him in the studio on a one-to-one daily basis. Try not to be swayed by the reputation of the master (or the lack of it), because a reputation grows not only from a response to the work of the master, but also from hearsay, rumor, jealousy, misunderstanding, and excess praise. In other words, judge and see for yourself by getting close to the person behind the reputation. Look for a master who challenges you, no matter what his aesthetic approach (sculptural, functional, or other). Keep a forward momentum by not settling for a near replica of a recent influence (such as your most recent college teacher). Better to be on the edge of security/insecurity than comfortable and self-satisfied. Try to grasp the working philosophy of the master, look at the master's work carefully, and above all listen well if you have an interview. Does this person seem to have room for other people with lives of their own and needs of their own to be satisfied? Can you sense whether or not the master treats studio work as a wholly separate thing, apart from personal life? Does that influence your sense of priorities? Do you want to work where you can be exposed to a blending of family life and studio activity?

Working in a situation where friction exists can be a terribly draining experience. I know of several apprentices—one in a foreign country as a visitor—who were forced to leave worthwhile positions because the friction between the master's studio demands and family life were not resolved. It may be that in our enthusiasm for finding a position we do not even want to know about these possible sources of friction. At the very least, look for a master that has been established for a considerable length of time (definitely more than a few months). It takes a great deal of time to arrive at some point of balance between personal and studio/business demands. I feel these matters are rarely resolved early in a studio career, nor are they necessarily likely to remain resolved on a permanent basis. My best advice is to give such matters their just consideration and avoid relationships where disharmony seems likely.

Does the working philosophy you sense in the studio revolve around a loving relationship with the entire craft process? This can be the most beautiful of all possible introductions to the life of the studio artist. Or is the thinking in terms of pounds, inches, and hours? I cannot forget a

comment made by an apprentice from such a place. He told me, "We have to turn off our minds every morning to get through another day." I know I couldn't relate to such a place myself. Surely it does not have to be this way!

### **The Work as a Guide**

This brings us to a consideration of the work done in a studio. Major clues about the master come from a thoughtful contact with the work he or she does. Look beyond productivity alone. Try to discern and measure the values expressed in the work. Studiously avoid involvement where pot boilers appear to be a mainstay. Dependence on this kind of ware usually signals an unwillingness or inability to come to grips with the real issues in the medium. Touch the ware; experience it to sense a richness, if it is there. Try to discover if there is something that speaks personally to you in the work. If there is that spark of feeling, and you find a place to work in that studio—this is a part of the value structure you can hope to carry away with you when your time is done. Impressive equipment and huge studios do nothing to make the work produced there more meaningful. Only people can do that. Realize that some of the warmest, most communicative people you will encounter may produce work which you find disappointing. Also, you may not like some of the people you meet during your exploration, but you may find their work both beautiful and stimulating. The apprentice candidate has to sense which characteristic will be most important, if he is ever faced with such extremes of choice.

### **Influence of the Master**

The stronger the master is as an artist, the longer it may take the apprentice to integrate the impact on his/her own work. You have to recover the balance by assimilating that influence, by facing the impact openly, evolving and then moving on to a personal statement. It would be of no use to ignore or hide from such influences, transient though they may be, nor to feel a need to claim defensively that the work done in the interim was all "my own." Whether you confront such influences head-on during the apprenticeship, attempting to sort out problems as they appear, or whether you let the matter ease itself over through the ensuing years, the fusing process will take place and the influence will be felt in one form or another. In the end, the apprentice who has chosen a master wisely is well served, for positive influences will mesh with personal goals, attitudes, and insights as part of a natural evolutionary process.

### **Factual Issues**

If it appears a workable apprenticeship is in the offing, there are then factual matters to settle.

*Studio Times:* What is the ratio of time spent doing studio work to time available for your own pursuits? Would you trade time on an hour-for-hour basis? Could you survive emotionally with no time for your own work? I would give very careful thought to what it might feel like, not being able to work on your own ideas as they surface. What about time together with the master? When can discussion take place and when can problems be aired? Will such things be catch-as-catch-can, or will there be a fixed schedule of critique?

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*Space:* Would you have a separate space and your own equipment, or would you be asked to bring your own tools? Is the studio designed to accommodate a second or a third person? (This can make a difference in the middle of the flurry and hustle of an active studio.) Could you get along with no space allotted specifically for your own use?

*Duties:* What would you be expected to do? (Try to have that spelled out clearly.) Even though the role you fill will change as your skills become more useful, it is best to have a good grasp of the general expectations on the master's part. Would you actually help make ware for the studio? Would you want to make large numbers of repeat pieces, or would you rather have more flexible duties? Do not sacrifice other aspects of your development by agreeing to concentrate on one small part of the studio activity. It may be quite convenient for the master to manage his apprentices in a logical, job-oriented fashion for his own organizational needs, but unless you can function in a variety of different roles, you will end up with a very limited grasp of the overall view of a studio and its multi-level functions.

*Money:* How would you survive financially? Would you trade studio work directly for the time and space necessary to work on your own? Would you be paid on a piecework basis (if at all)? Does the master expect you to pay him? With the sole exception of having an apprentice pay me, I have tried many variations of the trade system—or the piecework idea—and usually I vary the plan to suit the circumstances and the individual involved.

In their search for a worthwhile experience, it would help apprentice candidates to have insight into the problems the master must face concerning apprenticeship. Usually, inquiries about possible apprenticeship openings are answered by necessarily brief, negative replies from the master. Naturally, very little filters through about the complexities of the master's personal philosophy, which may color these decisions. I speak from my own experience and from contact with many craftsmen over the years.

Recently I worked as a juror for the apprentice grant section of the National Endowment for the Arts. During the jury process, it was apparent that very few well-established craftsmen from a variety of different media had applied for an apprentice grant. There are many possible reasons for this including a lack of awareness of the grants available, a lack of the need for an apprentice (or for money), and personal convictions that might conflict with the idea of accepting grants. I sense, however, that personal attitudes or convictions are more likely to be responsible for the many craftsmen who decline to make application for grants. Pride may have much to do with a reluctance to ask for money. Perhaps it seems to some that asking for assistance is tantamount to an admission that one is not worthy of respect (including self-respect) if money to pay an apprentice cannot be generated from within the studio itself. I myself have struggled with similar feelings, and I have talked to others who have a need for independence that totally excludes the possibility of accepting outside aid. Perhaps this is part of the birthright of the studio craftsman: the right to a stubborn pride.

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I understand these feelings because they motivate me as well. I can



see, however, that they have a pronounced negative influence on one-to-one crafts education at the studio level, where so much vital exchange can and should take place. We desperately need all devoted craftspeople to serve as educational resources! We must move toward better use of these valuable resources.

I would invite those in the crafts who experience discomfort with asking for financial assistance to consider the situation further. We all realize that many individuals in the crafts use approaches that are slow to produce finished work; low turnover and low profit are thus natural consequences. Surely, then, these are situations where grants could do enormous good. Many craftsmen maintain their preference to work alone, while stoically they accept a limited output due to a lack of studio help. You hear complaints about all that paperwork that goes along with apprentice involvement. In fact, a considerable effort is being made to greatly simplify the requirements a master must meet as the administrator of a grant. The list of reasons why apprentices are not taken could go on, of course. I still wonder, however, if deeply felt but perhaps misdirected pride isn't what prevents hundreds of worthy craftsmen from making application for grants.

To say that all we, as craftsmen, owe our society is the work we actually create is only a half-truth. We should reflect upon our equally essential obligation to put vitality back into the structure that has nurtured us over the years. We owe each new generation of craftsmen our skills, our philosophies, and an exposure to our lives as whole, if fallible, human beings. We cannot afford to halt the needed transfer of knowledge and feelings by denying contact because of pride or inconvenience. If we are not willing to give of ourselves, we have no right to criticize nor be indignant at conditions in the crafts which we wish were otherwise.

There is a very real possibility that despite your best efforts and highest motivations, no apprentice position will be found. You should begin your search by realizing that many of the masters you will contact may never have had an apprentice experience themselves. Many candidates who approach me in search of an apprentice experience express the firm conviction that apprenticeship is *the only* valid progression beyond schooling. The reality is, however, that there is only a terribly small supply of potential openings available. Therefore, you are left with two prospects—to give up or to begin on your own. It is possible to make a successful beginning without the apprentice phase as a staging point. I never had an apprenticeship, nor did thousands of others who are successfully practicing their craft. Sooner or later a beginning will have to be made. Look well at your situation, your personality, and your preparedness, and consider taking the plunge.

If I were pressed to say who might begin well without an apprenticeship, I would say self-starters. Motivation, enthusiasm, and courage, combined with a reasonable measure of practical know-how, are good starting tools. As with any approach to a craft, there will be an inevitable price to pay. If the apprentice pays with his own time for the gains of that particular kind of experience, the self-starter pays in equally specific ways. Constructive failure is a term I would apply to much of my own

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early learning in the studio. In fact, I can hardly confine the notion to early experiences, since to this day I occasionally bang my head against my inadequacies. I seem destined to try many new tasks or design problems the wrong way. Then, finally seeing the way not to do it, I find useful solutions. Time may be lost but never wasted in such a manner. Any tinker or mechanic designer in the past did the same. You must keep on trying until the fear of failure is forgotten. Now I try anything, and I consider temporary frustration a small price to pay for the sense of elation I receive from tackling the problems directly. I know I won't let myself fail for too long. I suppose this is another form of apprenticeship—a self-apprenticeship—that can last a lifetime.

Very possibly the time to break the dependency on the idea of a progression through an ordered system (school, apprenticeship) may be right now. You have only to look around at the abundance of contemporary literature dealing with virtually every phase of survival in the crafts. Special workshop programs, summer craft schools, and a multitude of sources for enrichment are there for the taking. It would be difficult, after a reasonable amount of self-directed research, not to come away thoroughly acquainted with the basic requirements for a sound business and technical approach to crafts.

To the highly motivated individual, the gathering of skills can almost be secondary to the enthusiasm for a beginning in studio work. Apprenticeship cannot in itself cure a lack of motivation. There is a spark that must come from deep within each individual to carry him past the temporary frustrations on the way to a deep and lasting commitment.

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*John Glick is a full-time potter who lives with his wife, Susan, in Farmington, Michigan.*

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## **Apprenticeship: Thoughts and Experiences**

by Marylyn Dintenfass

I have worked with seven apprentices in the last six years, and I've learned that a master-apprentice relationship, like all other important relationships in one's life, brings both pain and pleasure.

### **Thinking about an apprentice**

The idea of having an apprentice is very appealing. Most craftspeople can easily visualize the advantages of having an assistant, and there are many advantages—some obvious and some more subtle. The greatest advantage involves time; an apprentice releases the master from time-consuming and unproductive chores. The desire to be free for essential work and creative exploration is universal among artists. Without question, an apprentice can ease the burden of a busy studio. I have found that two who work well together can more than double the production of one. At the same time, sharing drudge work can ease the burden for both. There are many areas that an apprentice can be responsible for in a

clay studio: clay preparation, kiln upkeep, studio cleanliness, inventory, packing orders for shipment, invoicing, and testing new formulae. The potter is always seeking to expand his glaze repertoire. This requires tedious weighing and mixing of minute amounts of chemicals, recording results, and correcting promising samples. Testing of new formulae is an area which would be all but impossible for me to do in any depth, without the aid of an apprentice. It is also an area which can be a great learning experience for an apprentice who brings to it the freshness of first exploration. I have added many exciting glazes to my palette, and many of my glazes are named for the apprentices who helped me to develop them.

The ability of an apprentice to act as a sounding board should not be underestimated. An apprentice can give immediate feedback in many areas: pricing structures, design concepts, and dealings with galleries. I have found that verbalizing a pressing problem to a willing listener will result in a faster and more constructive solution than just thinking about the problem myself. An apprentice, even an inexperienced one, can clarify a point and offer good suggestions on a variety of subjects, from studio procedure to design problems. For example, I had an apprentice suggest removing a door which was constantly in the way when we were bringing ware from the glazing area to the kiln room. By simply removing it from the hinges, we gained ease of access and a new worktable.

A subtle but valuable advantage is the satisfaction of sharing information and experiences with an interested, receptive apprentice. The opportunity to function as a mentor and help an apprentice choose his future is extremely rewarding.

### **Facing reality**

The reality of having an apprentice can often be far less appealing than the fantasy. Most artists treasure their privacy and solitude. It is quite a shock to have your peace and quiet disrupted by the presence of another body in the studio. The apprentice is an intruder both physically and emotionally. The luxury of solitary work is gone, or at least curtailed. The apprentice will observe you, question you, and often cause you to look at yourself, your work, and your working habits through another's eyes. In this respect, having an apprentice can be quite a disconcerting experience. I remember one apprentice whom I had encouraged to ask questions. He did so to such an extent that I seriously thought of requiring him to wear a dust mask at all times "for safety reasons."

Time, mentioned earlier as an advantage, can also be one of the greatest disadvantages in having an apprentice. You have to work twice as hard in a sense, doing your own work as well as teaching your method of production and studio upkeep, and providing a learning experience for the apprentice. This sense of obligation on the part of the master—to provide a rewarding learning experience for the apprentice—can be quite a burden.

The training period, so crucial to the success of the relationship, is difficult. It is time-consuming at best and can be both frustrating and draining. Early in the relationship much precious time must be given over to training, and it becomes a continuous process as new procedures come

up. There is nothing more annoying than asking an apprentice to hand you the 120 mesh sieve while you're up to your elbows in glaze, and then getting a blank stare because you have neglected to mention that sieves come in various sizes.

When another person works in your studio, you will find that additional problems are brought in from the outside. Not only do you have to get along with your apprentice, but you may find yourself the unsuspecting recipient of emotions from unknown places. We each respond to our work differently—some find refuge there, some find it difficult to work when distressed. However, the master has usually found a way of dealing with his emotions so that they don't hinder his functioning in the studio. The apprentice may be experiencing daily work responsibilities for the first time, and he must learn to keep his emotions under control, so that he can function productively. You may, and usually do, become a role model, father-confessor, confidant, and therapist. I've lived through the problems of too many girlfriends, not enough boyfriends, the effects of late-night rock concerts, and more serious concerns. These trials and tribulations can be diverting, but are more often disruptive.

Ironically, the master can come to rely on the help the apprentice offers in such a way that it works against him. If the apprentice does not function for some reason—if he is irresponsible, ill, or disruptive—the master can have a difficult time reorganizing his time to resume handling the work himself. The better the service provided, the more you tend to rely on it.

The relationship with an apprentice is one of limited time. It is not unusual for the period of adjustment and development of complete trust to last as long as six months, yet the completion of the apprenticeship is commonly only one year. You have invested a lot of time in an experience which may have its greatest value for only a short period.

### **Making it work**

Are apprentices really worth the trouble? I think they are, but there are ways to minimize the pain and increase the pleasure.

A first concern to think about is space. Is there enough space in the studio for two people to work comfortably? There's nothing worse than physically having to bump into the person who is invading your studio. The master must be willing to give the apprentice some space, no matter how small, which can be her own. The apprentice should feel like a permanent part of the studio.

A relationship often fails when the apprentice is using the studio to produce his own work to sell. There are few studios which can accommodate two producing craftsmen, and that is not an apprenticeship at all but a shared space. It is crucial for the master to be primary. The reality is that the major time and focus is directed toward producing the master's work. This does create problems for the ambitious assistant; for when it is his time to work he is often too tired to put much energy into his own work after his obligations have been met. This is why the schedule should vary in the order of chores, learning, and independent work.

Another area to consider is money. Several years ago, when I was teaching in my studio, a bright seventeen year-old student asked me for a

job. I told her I would be interested in having her work for me in exchange for her attendance in my classes. She thought about it and decided that although she was very interested, her parents were already paying for the classes and would be willing to continue to do so. This meant that she personally would receive no monetary benefit. She asked if her parents could continue to pay for her classes and firing, while I paid her directly for her work. I agreed. It was a trade-off, but one which I felt would benefit both of us.

The arrangement worked until classes were over. I had a great deal of work and needed her help. I expected the exchange we had agreed upon to continue. However, there were no more classes for her parents to pay for, and she had come to count on the money she had been earning. She gave up producing her own work which, of course, enabled her to increase her earnings. Her salary, which was low at an hourly rate, added up rapidly. I felt more and more uncomfortable. I was providing an opportunity for her to learn a great deal, and I resented her single-minded interest in making money.

Because of this and several other experiences, I decided to work only with a nonpaying apprentice. I have done this for several years, yet financial considerations do still arise. I strongly believe that although I am not paying my apprentices, working for me should not cost them money. I have regularly paid for transportation costs whenever feasible and, in certain cases, have paid a small stipend to enable my assistants to feel comfortable and independent.

Guidelines must be set by the master to insure that the studio functions efficiently. These guidelines should be clear so that the apprentice knows what is expected of him, but they should not be hard and fast. It helps to sit down at the beginning of the week and discuss the schedule. The work rhythm changes constantly, and the apprentice must be advised of the whole picture. It is also useful to have a daily list of specific jobs to be done. When the scheduled work is not necessary, the apprentice can do his own work or, if he knows in advance, he can make other plans. Before an important show, all the energy has to be directed toward the master; afterward the balance can be restored between the master's work and the work of the apprentice. If the apprentice is aware of this, the work will go more smoothly.

Along with clear guidelines, there is a tremendous need for flexibility. You must be ready and willing to change as things come up for both you and your apprentice. You must constantly redefine your needs and your apprentice's needs as the relationship matures. As you grow to rely on and trust your apprentice with your thoughts as well as your work, the personal contact increases, bringing with it a new set of problems. It is important to keep professional distance throughout the relationship, and it can be done even when there are close feelings.

The master must be sensitive to the feelings of the apprentice, and to his own needs and emotions. The master-apprentice relationship is a close one, both in a physical sense and in the nature of the work you are sharing. There is an emotionally charged atmosphere inherent in the creative process, especially with clay. From the conception of an idea through the execution and completion, each step courts disaster. The



apprentice must be sensitive to this himself, but it is definitely up to the master to warn about any areas of special concern, whether it be certain things that cannot be touched, or certain times in the studio that require a subdued atmosphere. The apprentice is usually eager to please and can be quick to assume guilt. It is imperative, when teaching the mechanics of the studio, to include those areas which the apprentice should avoid. I neglected to do this with one apprentice and returned to the studio one day to find her in tears. She had decided to unstack a biscuit kiln on her own. I had stacked the kiln in an entirely different way from that with which she was familiar, to accommodate a series of large, very fragile sculpture components. They had been stacked in such a way that prior knowledge was needed to successfully unstack them. The work was in shards. It would be difficult to say who felt worse.

The easiest way to avoid this kind of situation is, of course, by communication. A master-apprentice relationship is a personal relationship—two people coming together to do important work. You may harbor grievances against a spouse, but never against an apprentice. Accidents and problems will come up and must be expected. If the reason is known, it should be discussed immediately and thoroughly, even explosively, if necessary. Then let it go.

If an apprentice doesn't turn out to be what you expected, you have two choices. One is to look for someone else who may or may not be more successful. Your other choice—if the person is someone you like, but is not as competent as you expected—is to change your concept of what the apprentice should be. You may get someone who is orderly, precise, and wonderful with glaze tests and stacking the kiln. Another may be just a slight bit clumsy, and stacking the kiln may better be left to you. Don't expect all apprentices to assume the same duties. The over-riding factors are interest, responsibility, and commitment. Accept each apprentice for his unique qualities, work with those qualities, and don't expect too much. Sometimes you get lucky.

### **Thinking about yourself**

As a master, you need to think about certain qualities in yourself before undertaking the responsibilities of an apprentice. You have to be efficient in your own work, and your studio should be well organized. It is unfair to bring an apprentice into a poorly functioning studio. You should consider what you are going to do with an apprentice once you get one, and what areas of work the apprentice can take over.

It helps if you are a good judge of character, judging both the apprentice and yourself as well. What kind of person do you want around you in the close confines of the studio? What are your own personality quirks which need to be faced or accommodated? For example, I tend to talk to myself when I work—not really talk, more like mumble. New apprentices always think I'm talking to them, and they feel obliged to answer something they can't quite hear and certainly can't understand.

It is necessary to have or to develop the ability to give clear directions. You have to know what you want before you can ask someone to do it.

Another question you should think about is whether you can be a

boss. Many people either can't be, or they have difficulty in this area. I do. It has been one of the more difficult problems I have had to deal with. My sense of authority has improved with experience and awareness. Knowledge of what needs to be done, when it needs to be done, and how I want it done structures the relationship and, in a sense, takes care of the problem. A woman I spoke to had a similar problem. She had difficulty working with an apprentice in her own age bracket, especially when it came to asking her to do the real drudge work (like cleaning the studio steps). She now works with much younger apprentices and feels more comfortable with this age group, as I do.

Can you communicate easily and relate to another person on an honest and open level? You need to be secure enough to voice your own needs and question the needs of the apprentice. You must be willing to meet some of your apprentice's changing needs, as they arise. You have to monitor the relationship constantly, both verbally and in your own mind.

### **Finding the right apprentice**

I find apprentices either by word-of-mouth or by contacting the art departments of local schools. They inform students of the position, and the interested ones contact me. I interview them and explain in great detail what the job entails. I tend to minimize the benefits and emphasize the hard work. I stress the need for a full commitment, and I discuss the length of time required—both the weekly schedule and the overall plan for the year.

I am direct about what I have to offer in the way of studio time and materials. In fact, I once wrote lists of "what I expect" and "what I offer," to clarify these areas for myself. I now show these lists to prospective apprentices. I've lost a few promising people by using such a direct approach, but I'm convinced it was for the best.

During the interview, I look for maturity (which seems to have little correlation with age), a sense of commitment to clay, and motivation. I also look for some kind of positive chemistry. An apprentice becomes an important part of my life. I have to feel free to be myself and to work with someone who will fit into my lifestyle.

Perhaps most important, I look for the ability to take initiative and solve problems. The apprentice should have the ability to function independently and add to the workings of the studio. He should be able to institute better ways of doing things. I always hope to learn as I teach, and I consider any new idea a "payoff."

### **Working with alternative high school students**

A method of finding and keeping an apprentice which has been extremely successful for me has been to work with students in a program run by our local high school. It is a form of alternative high school programming called the "Three I's" (Inquiry, Involvement, and Independent Study). The program enables students to become more involved with their courses by providing them the opportunity to pursue special areas of interest on an independent basis. It has flexible hours and encourages



apprenticeship and internship programs in many areas of the community. The students receive credit for their outside work.

I was introduced to this program by Jan, a high school senior in the Three I's program who came to work with me several years ago. Jan had large blocks of time with no classes scheduled, and she was determined to learn about clay and studio production. We worked out a schedule which was successful. She worked for me four days a week, four to five hours a day. We kept the time schedule flexible to accommodate her school commitments and my own work rhythm. Jan participated in all areas of the studio, from clay and glaze preparation through stacking and firing the kiln, to packing the ware for shipment. She was reliable and enthusiastic in everything she did. She had a strong desire to learn and made an eager and responsive assistant. We set time aside for me to give her demonstrations, assignments, and critiques. We worked together on the preparation of her portfolio, and my experience in taking slides and setting up a professional presentation was a tremendous help to her. I wrote a detailed and glowing recommendation for her for college, which was well earned. Jan was accepted by every college Fine Arts Department she applied to (as every other apprentice has been since). I took Jan with me when I needed help setting up exhibitions, and the involvement was exciting and informative for her and helpful for me. Jan received credit for her work with me, but worked many more hours than she was required to. The year was tremendously satisfying for both of us. It is a marvelous experience for a seventeen-year-old who is planning a career in art to have the opportunity to spend a year in a working artist's studio. Jan took full advantage of it and learned a great deal. I enjoyed the year as well, and we both thrived.

I have continued to work with students in the program. There are now three high schools in my area which have alternative programs. The advantages of using students in these programs are many. These programs, by their very nature, attract and recruit mature and responsible students who are capable of, and interested in, independent study. Many of them have already decided on the field in which they are going to concentrate. These high schools offer superior programs in a variety of fields, since they are usually more innovative than standard high schools. (The Three I's art program is superb.) Thus, the students are already prescreened for the attributes necessary for the job.

Students in alternative programs have time schedules which are appropriate for outside work, or which can be changed to accommodate it. The students are required to find and complete some independent study. Students usually have no severe financial needs, certainly not any which require the need to pay basic living expenses.

The credit students receive for their work and the help they get with college entrance requirements add to what the master can offer and make the exchange between master and apprentice a very balanced one.

I have found students in alternative programs to be highly motivated, competent, interesting, and mature. An amazing set of attributes, I agree, but true nonetheless. I have also been very lucky.

The only problem particular to a young apprentice (which I have encountered) is that of parental approval. Most parents are delighted,

but parental enthusiasm sometimes waxes and wanes according to the parents' understanding of the relationship. It is important to make sure that the parents of the student understand and approve of the arrangement prior to commitment. I do not involve myself with the parents because I feel that the arrangement is between the student and myself, but I do make sure that parental approval is obtained.

The problem of maturity becomes evident in some decision-making processes that the apprentice has to go through. There can also be a problem with commitment or staying power. (This year, for the first time, I have a new apprentice for the spring.) The commitment may drop off at the end of the year, which often coincides with the apprentice's last months in school. This may be the very time you need him most. I found that this drop-off can be avoided by stating the exact time commitment at the outset. And, truthfully, I find that many of these same problems come up with older apprentices as well.

### **Final thoughts**

Is apprenticeship a viable alternative to formal education? Yes, I feel it can be. For example, when a student has already determined his field of interest, an apprenticeship enables him to study that field immediately without taking the other courses which colleges require. Or, if a student has completed college without majoring in a craft and then decides to pursue the craft, he can gain knowledge and experience in the field without the rigors of formal education. In these cases, though, an apprenticeship is only as good as the craftsmen who are willing to spend the time and energy necessary to make it work.

As a substitute for formal education, apprenticeship can only work the same way that it did historically—when the apprentice can, after several years of service, duplicate the master's studio. However, since the university setting exposes the student to a broad spectrum of technical and aesthetic approaches, I feel that apprenticeship has its main value as a supplement to formal education.

An apprenticeship can be valuable at several points in a person's life. It can be arranged before a student enters college (the experience I am currently providing), or during an interim period in school to help a student reinforce his commitment to a certain field. Of course, apprenticeship can also ease the transition from university student to independent craftsman.

The master-apprentice relationship is basically one of exchange; exchange means giving something to another who has something you want or need. This exchange can be of several kinds. Historically, the exchange was based on service for information. I believe that this concept is still the most rewarding. Exchange may also involve a tangible object or a service. In the master-apprentice relationship, a balance of need and fulfillment must be established, not necessarily on a daily basis but over a period of time. When this balance is recognized and maintained, the relationship will be successful.

A good master-apprentice relationship is a rare and stimulating experience. It can develop into a long-standing friendship based on deep feeling and mutual understanding. Most of my apprentices have gone on

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to ceramic departments in universities across the country. Through them I have direct communication with sources of information, and I receive answers to technical problems which arise. The exchange of ideas which begins during the apprenticeship period keeps on growing, and long after the master and apprentice are no longer working together, the satisfaction and benefits continue.

*Marylyn Dintenfass is an artist working in porcelain. Her studio is in Scarsdale, New York.*

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## **My Apprenticeship to Frances Felten, Master Pewtersmith**

by James Gagnon

I was exposed to crafts at a very young age. My Mom and Dad had been brought up on farms in northern Maine, and both had used many home crafts demanded in daily living. My dad's basement workshop was always filled with broken furniture to be repaired for family and friends. It was there I first put some tools to use, or misuse.

My hands have never forgotten the pleasure of working with tools and materials. With a more-than-average interest and talent, I was steered into Industrial Arts Education. After six years of college education in Industrial Arts, I found little satisfaction in the thought of teaching. I had taken two years of elective courses in art, however, and had found my interest in metal arts quite intense.

My major in Industrial Arts was metal technology, with a minor in wood technology. This combination of technology and a feeling for art metal had meaning for me. When I graduated, I decided to try developing a career as a craftsman, and I started a studio, designing and making gold and silver jewelry. I worked on my own for three years, developing my skills through observation, reading and studio work. I had developed a good business with my studio and showroom in one place, but I wasn't satisfied with what I was doing. I wanted to do flatware and holloware. I tried my hand at some rather clumsy silversmithing and realized I needed some skilled training.

One day a gray-haired old lady with the most amazing twinkle in her eyes came into my studio and commissioned me to design and fabricate a dinner ring, using an amethyst which was once on her father's watch fob. In our conversation, as she referred to the designing of this ring, it became apparent this woman had more than an average understanding of metalsmithing. It was then she told me she was a pewtersmith. I told her of my desire to continue developing my skills into flatware and holloware. She offered no advice, but invited me to her studio to see her work when the ring was completed. When I finally finished the ring and visited her studio, I was surprised beyond words. At last I'd met a Master Craftsman! Her name was Frances Felten. Here it all began.

That same month Frances was scheduled to teach a two-week workshop, and I enrolled. I was not to know until some time later that this was a test as to my future apprenticeship with Frances Felten. When the workshop ended I asked Frances if I could continue studying with her once a week. She agreed. As time went on, one day a week turned to two days, then three. All this time my own studio was being neglected. It became evident to both of us that a fulltime effort of training was needed.

At the age of seventy, Frances was still working fulltime, but not producing enough to pay an apprentice. I worked, using up what savings I had, and then, to continue studying with Frances, applied for an Individual Artist's Grant, which came through the Connecticut Commission for the Arts. This allowed me to have another valuable year with Frances Felton. By the time this grant ran out, we had developed a working system of apprenticeship. Frances then applied to the National Endowment for the Arts for a grant under the Master Apprenticeship Program. When this grant was awarded to Frances, it gave us another year together. This was to be my final year of study before going on my own once again. It was during this year my life would be most affected and my approach and appreciation of my work in this medium developed.

Our work day began early, first with a cup or two of the strongest Columbian coffee a person could brew. (I eventually learned to enjoy it that way.) During this time we planned the day's work. I mostly polished work in those eight hours in my first year of study with Frances. Many of Frances's designs had to be pre-polished before they were put together. When there wasn't anything to be polished, I rough-cut shapes which were later developed. During this time I'd keep one eye out for new operations, techniques, and tricks of the trade. Frances would explain any of these in detail, if I so requested. Many were obvious upon seeing them done.

When polishing became almost second nature to me, Frances began to let me shape the rough cut developments and to sink bowls for her. It was during this time I really had the questions that needed to be answered. During our lunch hour each day it was like a lecture class in past, present and future pewtersmithing. We sometimes would run on past our lunch time into the late afternoon discussing technique, design philosophy and the development of metal into an art medium. Gradually I spent more time doing my own work, at first one full day a week, doing my designs with Frances's help in the technical approach. As my own skills developed, Frances gave me work to do for her, from start to finish. Working the material more and more, I was able to design with an educated understanding of the material. One time Frances and I entered work in the same competition. I was awarded best in media overall and, needless to say, was overjoyed. Yet I felt a little embarrassed to face Frances, whose work had not been awarded a prize. Her comment to me was one I will never forget. She said, if my work was not equal or better than hers, she would have felt her time wasted.

Frances had taught many workshops in her lifetime, but I was the first full-time apprentice she had had. It may have been Frances's age and health that made the urgency to train an apprentice so important. Frances wanted to pass on the many skills and techniques she had de-

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veloped in her forty-odd years of pewtersmithing. Whatever the reason, her emphasis with me was to learn the skills and expand, not parallel, her work. My apprenticeship was to end in May of 1976. But Frances's health was not very good, so I stayed on doing the orders she was not able to complete. During this time Frances told me time and again that I was her hands. In this I have been honored with a Master's compliment. Frances died that July, but her work, and the beauty she brought into so many lives through her work, will forever stand as inspiration to other craftsmen.

Frances, thank you. Love, James R. Gagnon, Pewtersmith

*James Gagnon is a metalsmith who works in pewter. His workshop is in Colebrook, Connecticut.*

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## An Apprenticeship in Denmark

by Tage Frid

I was born and raised in Copenhagen, Denmark. The educational system of Denmark, at the time of my youth, was quite different from that of America today in that a large percent of Danish students finished their education after the seventh grade; of course, the school year was considerably longer than the current American school year, i.e., 180 days. Classes were in attendance six days a week, with only a six-week summer vacation and the allotted holidays.

The only thing that the school of days past and that of today have in common is that school at that time was geared more to preparing the students for college. There was very little encouragement given, or effort made, to help students with the kind of interest I had—handcrafts. I became an apprentice, and later, after having been a journeyman for several years, I went back to school for a college degree; after that I went to the School for Interior Architecture.

When I finished the seventh grade, I was quite young and did not know what I wanted to pursue as a career. My father was a silversmith and an excellent craftsman. We had a lot of silver that had to be polished; this was usually my job. I did not enjoy it, so I was one hundred percent sure that I did not want to be a silversmith.

As a child, I had always worked with wood. Actually, I was still a child at the end of seventh grade—I was only thirteen-and-a-half years old. I was asked then if I wanted to be an apprentice with a cabinetmaker. I had to do something so I said, "Yes." Thus I became a cabinetmaker by accident, a fact which I am very happy about today. It was the best thing that could have happened to me.

When a person became an apprentice in Denmark at that period of time, he signed a five-year contract (with a three-month trial period), which was binding for both parties. The working hours were 7:00 A.M. - 5:00 P.M., six days a week; and also for five nights a week. It was also required that the apprentice attend a technical school from 7:00 P.M.-



9:00 P.M. where drawing and knowledge of the material were taught. My salary was about one dollar a week, plus all the spanking you wanted. I did not learn much about design, but I learned a great deal about wood as a material: its limitations, its strengths, and how to put it together.

At the end of the fifth year, the apprentice had to make a journeyman's piece. First, he went to a school for three days to make working drawings of his journeyman's piece. He was not allowed to talk to anyone; if someone had to go to the bathroom, only one person was allowed to leave at a time. After the three days, a complete set of working drawings (with all the details) had to be finished; these were then judged and graded. Usually the journeyman's piece was not the apprentice's own design. If the drawings passed, the apprentice went back to the shop, where he was taught to make his journeyman's piece from his own working drawings.

When working on the journeyman's piece, the apprentice had to keep all parts of the piece on his workbench, so that if at any time an inspector walked in, he would see that nobody was helping the apprentice. All the graduating apprentices delivered their finished pieces to the Town Hall. The pieces were later judged and exhibited.

The jurors were usually architects, masters from the Guild, and (as in my case) representatives from the Cabinetmakers' Union. The judges had a mirror on wheels, which had a long handle, so they were able to see the bottom as well as the top of every piece. If the piece had drawers of the same size, the judges might take one drawer, turn it upside down, and insert it someplace else in the cabinet that had the same drawer space to see if it would still work perfectly.

If, for some reason, the journeyman's piece did not pass, the case would then be taken to court, where several of the journeymen who had worked in the same shop as the apprentice would have to appear along with the apprentice and the master. If it was found that it was the master's fault, the apprentice would be removed from the shop and sent to another shop for whatever length of time the judge deemed necessary to complete the apprentice's education. The master, with whom the apprentice had originally signed the contract, would have to pay the apprentice the journeyman's salary while he was working in someone else's shop in order to complete his education. If it was proved that all the potentials for learning had been present at the original shop, the apprentice himself had to pay for the remainder of his education.

The system I was trained by would definitely not work in America today. First, when a student finishes high school today, he is about eighteen years old and is usually unwilling to spend five years as an apprentice, or sign a contract. I think five years was too long; four years would have been enough. The reason for the contract was that for the first two years the master had to spend a lot of time teaching the apprentice and paying for all the material the apprentice spoiled while he was learning. In the remaining years of the contract, the apprentice might, through his work, be able to pay the master the cost of that education.

Today, a small shop with three or four people cannot afford to take in an apprentice unless a four-year contract is signed. One way an apprenticeship position might work in our society today would be if the

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apprentice were to pay a small tuition while learning. The time might be cut to two years if everything the apprentice makes during the period is considered to belong to the master. It should be the master's design. After being taught by a capable craftsperson, an apprentice should be able to begin to make his own design. I cannot see how anyone can start designing anything if they do not know the material in which they are designing, i.e., its strengths, its limitations, and how to put it together.

For the purpose of guiding a prospective apprentice to a master that is capable of working with an apprentice, an organization such as perhaps the American Craft Council should inspect the shop that wishes to start an apprenticeship program. If the shop is deemed qualified, a certificate should be given, allowing the shop to take in a certain number of apprentices. The shop should be made to agree to be subjected to inspections at any time during the apprentice program. A book on the subject of guidelines for apprentices might be published; it should list all the accepted shops, and it should be kept updated.

(This article appears here with the approval of the editors of *Fine Woodworking* magazine.)

*Tagge Frid is a furniture designer. He teaches at the Rhode Island School of Design, Providence, Rhode Island.*

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## The Business Side of an Apprenticeship Grant

by Clotilde Barrett

Soon after I started publishing *The Weaver's Journal*, I discovered that producing a journal took more of my time than I expected. There was little time left for weaving. At the same time, I had more experiments and projects than ever that I wanted to do, and a greater need for projects that I could publish in the journal for my readers' information. Friends helped, but it wasn't enough.

I read in the National Endowment for the Arts publication, *Guidelines for the Visual Arts*, that grants were available for apprenticeships in the crafts. I applied for an apprenticeship grant in weaving, and I was delighted when I received word that it had been granted. So I hired an apprentice—a woman with knowledge of the basics of weaving who wanted to learn more about her craft. She was able to carry out some of the research and weave the designs I had wanted to do, while she perfected her weaving skills.

I soon discovered, however, that there was another side to the grant that I had not expected. That was the mass of paperwork involved. The money received from the grant had to be handled efficiently, and careful records had to be kept. It was the first time I had to deal with a payroll. With the help of an accountant, Raymond A. Stone, I began to face the realities involved in administering a grant and working with an employee.

The following steps are those required in Boulder, Colorado, but



most of them are required in some form in all other states also:

1. I needed to obtain an employer's identification number from the Internal Revenue Service.
2. I had to apply to the Colorado Department of Revenue for an employer's withholding tax registration.
3. From the Department of the Treasury, Internal Revenue Service, I needed to get up-to-date employer's tax guides: Publication 15, May 1977S for income tax withholding.
4. I had to get the state income tax withholding tables from the Colorado Department of Revenue. (Tables 3 and 4 were used to compute the take-home pay of my employee.)
5. Then there was workman's compensation insurance which I, as an employer, had to provide. I decided to do this through the State Compensation Insurance Fund rather than through a private insurance firm. For this I needed form CUC-1, federal form 940 and a form for the Colorado unemployment compensation.
6. As the end of the year came, I found I needed a variety of government tax forms—W-2, W-3, and W-4.
  - a. W-2 forms were to be filled out by the employer
  - b. W-4 forms were to be filled out by the employee
  - c. W-3 forms were needed to transmit W-2 forms to the Internal Revenue Service.

I also had to send copies of the W-2 forms to the state, along with a report of the amount of income tax withheld.

As you can see, the accounting records necessary, and the government forms to be filed, are somewhat formidable, but I believe it is worth it. I look at the work accomplished by my apprentice—experimental weaves, tapestry, wall hangings, a fine chenille rug, and an in-depth study of summer-winter weave, and I feel satisfied that my grant was well worth the hassles of the time-consuming paperwork. Also, my apprentice expressed an appreciation for the weaving knowledge and expertise she learned during her apprenticeship.

Most artists and craftsmen know little about accounting, and about the government forms needed for administering a grant. I would like to see a study done by an accountant which would be made available to all recipients of grants. This would help the grantees to prepare for the paperwork involved, and whatever else must be done, rather than leaving them to discover the necessary procedures one by one. A simple set of instructions could save the grant recipient hours of time and frustration, and bring him peace of mind.

*Clotilde Barrett is a weaver and publishes The Weaver's Journal. She lives in Boulder, Colorado.*

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## **A Public Accountant Comments on Governmental Regulations for an Apprenticeship in Colorado**

The employer must separate the hours worked by the employee into regular time, overtime, and holiday time, since the rate of pay usually varies with the type of work. If special equipment is used, or if supplies are consumed, these facts must be recorded since they will influence the cost of the finished goods. There are no prescribed forms for these records, but there are a variety of commercial forms which may be used.

There are various periodic reports that must be filed to account for the income and sales taxes that have been collected. For federal taxes there is a quarterly report to be filed on form 941. If there are several employees, or if the wages are high, there may need to be interim deposits made on form 501, as explained on the back of form 941. Note that the employer pays one-half of the FICA tax shown on line 6 of form 941.

Colorado requires a monthly or quarterly report of the state income tax withheld, based on the amount collected in the period. If the amount withheld in a quarter is no more than \$100.00, it may be paid with the quarterly report by the end of the month following the quarter.

The CUC-1 report is a quarterly report to Colorado of the wages paid to each employee. The employer pays a tax of 0.1% to 2.7% of the first \$4,200.00 of wages for each person, for the state unemployment insurance.

The sales tax reports for Colorado and the RTD (Regional Transportation District) are filed on form DR 100. The total sales tax, including the Boulder tax, is 5½%. The sales tax on applicable items be paid by the merchant, even though he may have failed to collect it.

At the end of the year, a W-2 form is prepared for each employee and distributed as indicated on the form. A copy of the form is also sent to Colorado with form DR 109.3. The forms to Social Security Administration are attached to form W-3 and filed by February 28.

At the end of the year, a form 940 is filed, covering the federal unemployment insurance contribution. This tax is 0.7% of the first \$4,200.00 of the wages of each individual, and the report is due by January 31.

An annual reconciliation of income tax withheld is filed with Colorado copies of the W-2 form. The report is on form DR 109.3 and is due by March 15 of the year following the year for which the report is made.

The above information is believed to be accurate as of this date (1978), for the income tax and sales tax reports used in Boulder, Colorado.

Raymond W. Stone  
Accountant  
3005 Carnegie Drive  
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# My Apprenticeship in Germany

by Barbro Hettling

During the last two years, I have worked as an apprentice in Germany. I think my apprenticeship was fairly typical of an apprenticeship in Germany. Of course, it depends on the place you work and the people you work with. I will try to be factual, but I think my personal experiences are too heavy for me to be able to ignore them totally.

I think it would be best to start with a description of an apprenticeship in Germany—how it is organized and controlled by the two institutions called *Handwerkskammer* and *Innung* ("Chamber of Handicrafts" and "Craftsguild")—then describe my particular experiences—what I felt was lacking and what I think should be changed.

In Germany we are required to be apprentices for three years. In the middle of the period of time we have to take a test to find out what we have already learned and what else is necessary for us to learn to be able to pass the journeymen's examination. It is impossible to fail this test. It is given only for the purpose of comparing your knowledge with that of others. The usual time to take this test is after one or one-and-a-half years, sometimes even after two years, but never before the end of one year. Our master makes the decision as to whether or not we are allowed to go. Without his approval, it is impossible to take the test. Usually after one more year we are prepared for the journeymen's examination. The conditions for the tests are made by a master team and are controlled by the craftsguild.

We have to work forty hours every week, normally 8:00 A.M. - 5:00 P.M.; sometimes we even have to work Saturdays, with a one-hour break for lunch. We are paid 120 DM (\$60.00) per month in the first year and 140 DM (\$70.00) to 170 DM (\$85.00) in the second and third years. It might be even less than that—80 DM, 90 DM, 100 DM, are the minimums I have heard of; 350 DM to 450 DM was the best paid apprenticeship I know of, but that was quite unusual.

During all this time, apprentices also have to go to trade school, which involves about two or three months of classes every year. If you are more than eighteen years old (that means, if you have finished ten years of school), you don't have to go to trade school, but if you want to go, the master cannot prevent you from going. In addition, we have to write a journal (notebook) every second week about what we've just learned—for example, how to make handles, how to glaze pots, how to prepare biscuit-fired pots for glazing. This notebook has to be written in the evening after work and has to be shown to our master and signed by him. The journal is required for both tests, but it is especially necessary for the journeymen's examination.

That is the basic outline of an apprenticeship. To explain a little more fully, however, I would like to describe a typical day in our shop.  
**8:00 A.M.**

(Starting with the cleaning up from the day before, which is)

**A. Every day**

1. Sweeping (dry and wet) one room

2. Cleaning the potter's wheels
3. Cleaning my master's tools and putting them where they belong
4. Cleaning the cat's box
5. Getting oil for the furnace

**B. Once a week (as necessary)**

1. Cleaning the windows
2. Cleaning the pot shelves
3. Looking after the machines (cleaning them up and oiling them)

(This should be finished after one hour, because we have to be ready for work at 9:00 A.M. If we are going to glaze that day, the glazes have to be prepared.)

**9:00 A.M.**

Master appears and gives orders, for example:

50 cups, each 180 grams

30 mugs, each 450 grams

8 jars, each 1000 grams

(After that my master leaves. Sometimes she comes in one more time during the morning to have a look around and see if everything is all right.)

**9:00 A.M. - 9:30 A.M.**

Taking care of the things we threw on the wheel the day before. That means, for example, turning them upside down so that they can dry steadily and slowly.

**9:30 A.M. - 11:00 A.M.**

Sitting at the wheel and throwing

**11:00 A.M. - 11:30 A.M.**

Break

**11:30 A.M. - 1:00 P.M.**

Throwing

**1:00 P.M. - 2:00 P.M.**

Lunch

**2:00 P.M. - 5:00 P.M.**

Finishing the work of the morning

Throwing something else

Preparing clay for the next day

(During these hours my master is present.)

We sell our pottery in the same room where we make it, so we are often interrupted by a customer who needs some help or wants to buy something. Sometimes that makes it difficult to finish the designed production.

**Personal Experiences and Critiques**

**A.** I did not go to school in the first year of apprenticeship because I didn't know I could. Even for those who know, it is sometimes difficult to afford to go because there isn't a school for ceramics in every town, and it is usually up to the apprentice to pay for the schooling. For me, the nearest school was about three hours by train (250 km., or 160 miles), so I had to find friends in that city or rent an extra room. You can be reimbursed for the train fare (one way and return), if you request it. Another point I might make here is: If you go to school, it often gives the master an excuse for not explaining what you need to know; he might use the

argument: "Why don't you know that, if you go to school?" And we have to do twice as much production work after school "because you've had a month off!"

Although going to school is the apprentice's right, and it is a possibility that appears to be useful and of good intention, it is very often nearly impossible to go because there are so many difficulties placed in your way by the master. Because of this, sometimes it really isn't worthwhile to try to manage the difficulties. Furthermore, the lessons at the school are geared toward younger apprentices who have just finished grammar school (nine years of school); that means a lot of general knowledge is taught in the lessons—German, history, and geography. There is very little specific reference to ceramics. That was the idea of a trade school ten years ago, when most apprentices were fourteen to sixteen years old; but the educational system has changed, and so apprentices today are often eighteen to twenty years old. Apprentices for ceramics are often older, because it is their second trade (second education). Important things are lacking in the school lessons: how to build a kiln, how to fire pottery, how to mix glazes, facts about materials, history (especially for ceramics), perhaps knowledge of different cultures (e.g., Chinese and Islamic pottery), and something about the rights and duties of an employed person—especially an apprentice.

**B.** I mentioned earlier that a notebook has to be written in the evening, after work. This is very difficult because it extends your working day to ten hours, and there is hardly any time left to relax or to do household chores. My proposal would be to have one afternoon off every week (six hours in two weeks), to have time to write the journal. I think it's a good idea to write down the things you have learned, but it takes time to do this well instead of simply writing it because it has to be written.

**C.** I think a three-year apprenticeship is too long. Three-quarters of that time is filled with production work. I had to throw my own forms and then find the time to work on them. Perhaps (at least) in the last two years that could be expected—to have a basis from which you can start work in your own studio. I think that in the first half-year or year it is quite necessary to throw the forms you are told to throw, in order to get a feeling for what the possibilities are with clay.

I would have liked to learn more about sculpture, wall-pictures, and handbuilding. None of this was taught in my shop, nor, as far as I know, in hardly any shop. If you listen to the master, it would seem that it is more important to keep a smile pasted on your face than to learn the basic skills, such as glaze-mixing, or how to exercise a little freedom. To have enough time for your own forms and more sculpture and handbuilding should be an integral part of an apprentice's education.

Apprentices are also required by the Craftsguild (Innung) to make experiments with glazes and, if possible, to have a glaze of their own on one of their examination pieces. Therefore, it is necessary to learn how to make a glaze; that is something that takes time—time one has to spend away from the wheel, time which is therefore seen as "unproductive." My master saw it as her right to refuse to give me the time: to have your own glaze is not a necessary part of the journeymen's examination. In other words, if you don't bring a glaze along, you will not fail, you will



only get a lower grade. In trade school we learned a little about making glazes; we learned just enough not to fail. We were not told exactly at what temperature the glazes have to be fired, so our learning was just good enough for the exam, but not really helpful for our work as potters.

In my shop my master did all the firing and glazing by herself. We had to help her with all the "dirty" work, such as cleaning up, which I really didn't mind. I think that that is self-explanatory and need not be discussed. I only mind cleaning up for someone else if that is the only part of the glazing and firing processes that I learn about.

I had the opportunity to use a kiln once at a school where I gave a class in ceramics. I then started to discover things for myself which are impossible for most apprentices to learn because they don't have a kiln to work with. Nevertheless, using a kiln takes a great deal of time, and after an eight-hour day you have hardly any energy left to start doing large experiments.

**D.** I would also have liked to have the opportunity to determine the test date by myself, or at least together with my master. This is possible in some places. What I mean by this is, in case there is some disagreement, that the date not be completely dependent on my master's decision alone. I talked about that with my master, and her argument was always: "If you fail, it would be said that I am a bad teacher." I myself don't think it would reflect directly on her abilities. There is no assurance that I won't fail, if she "announces" me. I am willing to take the responsibility for myself.

In general, I would be happy if there would be more of an exchange of information, especially between master and apprentice, instead of this competition, this fear; more working together instead of working against one another.

When I started my apprenticeship, I had decided to be a potter and to find my own way to work with clay. I expected to have at least the possibility of learning that much. What I learned instead was that I am supposed to be a cheap production worker instead of a potter.

The feelings I am expressing are very common among apprentices. We talked a lot about them when we met at school.

Here are the test conditions for the apprentice in Germany:

### **Intermediate Test:**

#### **1. Throwing**

- a. A dish or plate 22 cm. diameter
  - b. Two absolutely equal jars, 18 cm. height and 12 cm. diameter (no cylinder allowed)
  - c. Series of at least three pieces (jars)—all equal—containing 1 liter (about  $\frac{1}{4}$  gallon)
  - d. A piece the same as a model piece provided at the test (a small vase)
- 2. Put all different kinds of handles one knows on one pot—the more, the better**

Time: 1½ hours

#### **3. Decorate one piece in a technique one likes, for example:**

- a. Sgraffito
- b. Painting with glaze

- c. Painting with slips (engobes)
- d. Whatever else is possible

Time: 1½ hours

#### 4. Theory

We have a question catalog containing approximately 150 questions about materials, kilns, firing, and glazes, for instance:

- a. How do you prepare a material for firing at 1260° C?
- b. What happens to a material if you biscuit fire it too quickly?
- c. Firing pots: at what time does the water disappear—natural water, chemical water? What happens to the pots?
- d. How do different materials in glazes work? (Give examples and results in the following manner: cobalt oxide gives blue.)

We were asked ten of the easiest questions; the rest of the questions were left for the journeymen's examination.

Time: 10 minutes to 1 hour.

The time for each section is measured just right for what is expected. It is not necessary to hurry, but you must work straight through.

#### **Journeymen's Examination:**

1. We have to bring along
  - a. A dish or plate, 30 cm. diameter
  - b. A jar 25 cm. - 30 cm. height, 15 cm. diameter
  - c. A decorated piece
  - d. One more piece—whatever we want: Thrown service (tea, wine, coffee) or  
Wall-picture or  
Sculpture or  
Big dish or vase (thrown or handbuilt. All measures are minimum.)  
On one of the pieces should be the apprentice's own glaze.
  - e. The notebook we were required to write during the apprenticeship
  - f. A statement from the master that we did all the above-mentioned pieces by ourselves and without any help.
2. Every other part of this examination is the same as the corresponding part in the Intermediate Test, except that everything should be more exact and a little larger. Therefore, the throwing part changes as follows:
  - a. A dish or plate of 30 cm. - 35 cm. diameter
  - b. Two absolutely equal jars of 25 cm. height and 15 cm. diameter
  - c. A series of at least three jars containing about 1.5 liters (about .4 gallon)
  - d. A piece the same as a model piece provided at the test (large vase)
  - e. A free piece—as large a piece as you are able to throw (dish or jar)

*Barbro Hettling is a potter who lives in Bielefeld, W. Germany.*



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# Nine Parameters of the Paying Apprenticeship

by Richard Minsky

## 1. Selecting the Apprentice(s)

An individual or organization concerned with training people in a craft discipline must first decide how many apprentices to take on. An individual craftsman may be able to take on one or two apprentices, where an organization may be able to employ several apprentices because it has a shop with several experienced artisans. Consider the needs and production of the shop and the amount of time which can be devoted to the apprentices' education. Once these are determined, a pool of candidates can be chosen; from this pool the apprentices can be selected. These may include whoever walks in the door, but the opportunity may also be listed with guidance counselors and in alternative education publications. The applicants must be screened for their goals, motivation, skill level, dexterity, and personality—can the artisan work with them and, if more than one is to be taken on, does the applicant work well in a group? A portfolio is an indication of the level of development, and tests, (in which the applicant is asked to perform various operations after having watched them being demonstrated) can be administered. Skill level is an important factor, and the objectives of the apprenticeship program may involve giving basic craft skills to people with the desire and the will to learn, or the program may be directed at giving technical skills to people with experienced hands.

## 2. Workspace

The shop must be designed so that each apprentice has enough territory to feel relaxed while working. Pressure of too many bodies too close together is distracting, and enough tools for the different operations are necessary to avoid a queue.

## 3. Choice of Work

Generally there are two kinds of jobs—paying and educational. If the apprentices are to earn their keep, they may often have to perform repetitive procedures. The benefit of velocity development and refinement of skill then diminishes rapidly. Last year we made 1200 books of a similar construction for New York Central Supply Company. By the time 1000 were finished the apprentices were thoroughly bored with them, and I gave them the choice of whether to take on more. We did the other 200 because the apprentices were caught in a cash-flow hole, and they wanted to get paid. A job which demands new skills is more interesting, but the time it takes to learn the skill, practice on a dummy, and execute the work for the client costs more than the job pays. This is particularly true of restoration work, in which each book has different problems and a different structure. On mass production work we can use division of labor, but on small jobs one individual performs all the operations, so changeover time is a significant factor. In addition, the apprentices work on their own projects but don't get paid for that work unless they are on a grant for that purpose. At the Center for Book Arts, part of the pay

is in the form of instruction from our regular faculty, from whom they receive two three-hour classes on their own projects and two three-hour classes on Center projects. This way we try to build up skill levels so a more experienced apprentice is able to take on work which is more demanding.

#### **4. Pay Schedule**

We start people with a two-month trial period at no pay, during which time they become familiar with our tools and procedures, and we can evaluate their work and relationship with others around the shop. After that they receive three dollars per hour twenty-five hours a week of work. As minimum wage increases, we stay ahead because they are skilled workers. We started paying apprentices after the first year program because unpaid apprentices had to find other jobs, usually at minimum wage, which drained their energy and didn't cause them to use their hands properly. If the apprentice has a matching grant, the week is forty hours, half of which is spent at the apprentice's discretion on a project worked out with the Director of the Center for Book Arts. This may be research or practice. For two years we paid one of the apprentices to be the foreman and control traffic flow, at fifty percent per hour more than his regular salary, but the apprentices have since voted to equalize wages and share responsibilities, with a different person managing each job. Of course, the wages paid are low and insure survival only, but the largest return the apprentice gets is his investment in human capital—the information he accumulates by the end of the program which will enable him to increase his life income by as much as \$200,000 to \$500,000. This and the nonpecuniary returns such as being in a beautiful shop doing work one loves are the significant benefits of apprenticeship.

#### **5. Cash Flow**

To pay salaries, rent, utilities, insurance, and so forth while this program is going on is quite a balancing act. Grants from government and from foundations are two sources of cash, and we also require a fifty percent deposit on all work we produce for a client. When we design and produce works of art, we do so on speculation, and these developmental objects are hardest on cash flow. We have been working three years producing Book Arts, a publication in magazine format and although we must pay the apprentices who work on it there will be no returns until it is finished. The same is true of other objects, portfolios, and so forth which we sell at Christmastime at our annual Open House, when the public is invited to watch demonstrations by apprentices of papermaking, printing, binding, marbling, and woodengraving. Still, there are weeks without pay, when faith and dedication hold everything together. Morale then drops, and personality conflicts surface—until a job is finished or a grant check comes.

#### **6. Business Training**

Noncraft work is just as important as technique for the apprentice who will go out and set up a shop or work for someone else. Sales and marketing, bookkeeping, invoices, estimating, and shop management are essential to survival in a free enterprise economy. By having a different person as foreman on each job, the details of ordering materials, scheduling time, and quality control become practical skills for everyone.

By keeping time sheets with production records, efficiency is improved and the apprentice has a better idea of how long it takes to do each operation—essential information for estimating pricing when on his own.

#### **7. Placement**

After a person has reached his desired skill level and has the urge to move on to a new experience, we assist him in setting up his own shop or we turn him on to situations which come to us. Last year we placed two binders in Verona, Italy, to set up a shop for a fine art printer. Others have set up in Ohio, upstate New York, New Jersey, Manhattan, Brooklyn, and at home near the Center, using our facilities for their own work. We are also a membership organization which former apprentices join, and through which they keep in touch with each other; thus we serve as a supportive association.

#### **8. Interpersonal Relationships Among the Apprentices**

One person with a poor attitude can make the whole crew miserable.

#### **9. Responsibilities of the Craftsman or the Organization**

There is constant danger of administration taking over and the craftsman not having time to work. A good executive is necessary. Another danger is that apprentices will be used for drudgery work. They must have opportunities for feedback—we have weekly meetings—and they must listen to the suggestions made. The craftsman doesn't always have to teach: to see the master at work at his/her own pace is often an excellent lesson in itself.

*Richard Minsky is a book artist, and the founder of the Center for Book Arts. He lives in New York, New York.*

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## **Craft Apprenticeship in Historic Site Museums**

by Gary Brumfield

The Colonial Williamsburg Foundation has the largest craft program of any historic site museum in America. Twenty eighteenth century shops are open throughout the year and several additional crafts are done outside in the summer season. Fifty-four masters, journeymen, and apprentice craftsmen, and about an equal number of craft interpreters, are employed in this program.

The success of the craft program as an educational tool in this museum is due largely to the decision to staff the shops with skilled craftsmen. This has given Colonial Williamsburg the opportunity to recreate an aspect of eighteenth century life beyond just the physical arrangements of buildings and objects.

Craftsmen are employed to practice their trades in authentically furnished shops, using the same materials, tools, and techniques used by eighteenth century craftsmen. The guidelines for selecting these craftsmen are:

1. The craftsman should be highly skilled or capable of being trained

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to a high degree of skill in the techniques of his craft.

2. The craftsman should have an interest in the history and tradition of his craft.

3. The craftsman should have teaching and public contact abilities.

4. The craftsman should have supervisory and business abilities.

A program of apprenticeship training for career employees now exists in thirteen craft shops, and fifteen men and women are now being trained. Many of the master craftsmen, and all but one of the journeymen, received their training in Williamsburg.

The main purpose of Colonial Williamsburg's apprenticeship programs is to provide craftsmen to staff the museum's shops. Most of those who successfully complete their apprenticeship become career employees of this foundation.

Another purpose of the program is the preservation of the skills and techniques of the eighteenth century. The museum realized, in the 1960s, that the preservation of a craft could be as important as that of an object. Some of the crafts now practiced in Williamsburg use technology which had to be rediscovered or brought over from Europe. Only by traditional apprenticeship can these crafts be protected from modern technology.

The length of the apprenticeship varies from trade to trade and is usually based on the achievement of a skill level rather than on the amount of time worked. Many of the apprentices start out with some previous experience, either from a hobby or some formal education. An average apprenticeship might be from five to six years, but some skills require a longer training period.

Because the apprentice is working in front of visitors and thus must spend as much as one-half of his time interpreting his craft to them, the learning process is slower and more difficult than it would be in a private shop. Even ten years of working in a museum shop would not equal the craft experience a man received in a six-or seven-year apprenticeship in the eighteenth century, because the eighteenth-century apprentice worked from daylight to dark, six days a week. A successful apprentice today must love his work enough to put in many additional hours of reading, study, and work in his home shop.

Working in front of the public also affects the apprenticeship in other ways. The apprentice must be hospitable to his guests no matter how hard he is struggling to learn a technique or concept. He is often required to explain skills which he is just beginning to master. Some potentially talented apprentices do not have the special ability to communicate with the visitors, and those apprentices cannot be employed in a museum shop.

The apprentice's work must sometimes be evaluated and corrected while visitors are present. This shows the visitors how apprenticeship works, but unless the master is tactful, it can embarrass the apprentice. Both the apprentice and master must learn to separate criticism of the apprentice's work from criticism of his ability or personality.

An apprentice in a museum craft program must have a unique combination of craft skill, teaching ability, and cordiality. A candidate lacking in any of these areas will not succeed. In this respect, a museum craft

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apprenticeship is more difficult than one in a private shop, but in other respects it may be easier.

There is usually less pressure to produce in a museum shop, so more time can be spent by the master in instructing his apprentice. An apprentice can take longer to learn a skill because his income is not based on his production. The quality of the finished object is more important than the speed at which it is produced.

A person interested in learning an eighteenth century method or technique must go to a museum shop where modern laborsaving devices can be ignored. Some trades are kept alive only because of museum craft programs.

Another advantage of working in the museum shop is that an apprentice in the career employee program does not have to find a job when his training ends. His future can be with the museum, if he so chooses. Few private shops can offer this opportunity.

Finally, a museum craftsman does not have to market his products through galleries and shows. The large number of visitors usually provides an excellent market.

While all of the above information has been drawn from my own experience with the Colonial Williamsburg Craft Department, there are several other museums which have traditional craft demonstrations. A few of these also offer apprenticeship programs. That information was obtained in March 1978, and changes may have occurred since then.

My personal assessment of the current state of apprenticeships in the crafts is limited to the museum area. In the appendices you will find that only thirty-six apprentices are now working in the fifteen museums contacted. They are learning sixteen different trades. I think those figures present graphically the poor state of the craft apprenticeship programs of these museums.

Only Colonial Williamsburg and the Ohio Historical Center are making an effort to train enough craftsmen to staff their own shops. The other museums either hire skilled craftsmen as needed, or hire people who are put to work in front of the public with almost no training. Because skilled men are rarely available, the latter often becomes the only choice for these museums.

The problem is usually a lack of money. Few museums feel they can afford an apprenticeship program large enough to train people for all the trades they want to show the public. I feel that cutting expenses in the apprenticeship programs is false economy, because it results in the lowering of the quality of the visitor's experience, and this will eventually reduce income from admissions.

Another problem can be finding a craftsman who actually knows his trade well enough to train an apprentice and at the same time work before the public himself. Craftsmen in some trades are rare today, and these men expect more salary than the museum is able to pay.

Apprenticeship can be a viable alternative to formal education if the length and quality of training is sufficient to actually produce a skilled craftsman. Unfortunately, many programs fail to meet this requirement.

The museums are partially to blame because some have shortened



their apprenticeships or lowered their standards of quality to cut costs and encourage applicants. A complex craft cannot be learned in a two- or even a four-year program. A person completing one of the shortened apprenticeships claims to be a craftsman; this undermines the public image of the craft and sours employers against hiring other apprentice craftsmen.

In some cases, social pressure has caused apprentices to demand quick advancement to the title of journeyman. Since it only takes four years to get a college degree, an apprenticeship of six to eight years seems excessively long to many of today's youth. Of course, becoming an apprentice in order to become a journeyman is very much like going to college to get a degree rather than to get an education.

Whatever the reason for it, serving an abbreviated apprenticeship is not a viable alternative to formal education. One of these programs could, however, be a good supplement to a college degree in the same field.

Because many people fail to complete their apprenticeships, I suggest that a person complete a four-year college program before deciding whether or not to apprentice in a trade. The college experience gives the individual time to mature and to learn to relate to people. The formal education also provides the student with skills to earn a living if he does not finish the apprenticeship program. I feel that developing honesty and professionalism should be a major concern in apprenticeship.

In the museum crafts it is very important for craftsmen to be honest when talking to the visitors about what part of the work they can actually do, and how their work compares to that done in the historic period represented by the shop. The slightest exaggeration will be discovered by a knowledgeable guest and will undermine the credibility of the entire museum program.

The craftsman must also develop a professional attitude toward his work—its value—and his fellow craftsmen. A professional craftsman will not take on work below his standards, do work for less than its value, or criticize another man's work for personal advantage. I think it is the responsibility of the master to set a good example and pass on a sense of honesty and professionalism to his apprentices.

The most difficult barrier which confronts the apprenticeship system is the lack of money. If we hope to hire top quality candidates, we must be able to offer them wages during and after their apprenticeship—wages which compare to what they could earn in any other field. Love of the trade alone will not draw the men with the aptitude and attitude that is necessary for a museum to develop a craft program which will attract visitors.

To encourage and develop the apprenticeship system in America, I think that educating both the public and the school systems about the availability and the nature of existing programs would be the first step. As a second step, I would work to improve the professional image and financial rewards of the crafts, so that young people would think about them when selecting a career. Finally, I would work with existing state organizations to expand industrial apprenticeship standards to cover professional craft apprenticeships.

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I believe a properly directed national program for craft apprenticeships would benefit both craftsmen and prospective apprentices. In addition to the preceding suggestions for developing the nation's apprenticeship programs, I would like to see a published critique and rating of existing apprenticeship programs.

I think that some national organization should take the initiative in establishing standards and definitions of just what an apprenticeship is, so that short training programs or internships will not be confused with an apprenticeship. It should also separate craft and apprenticeships from art training programs.

*Gary Brumfield is a gunsmith, and is associated with the Colonial Williamsburg Foundation in Virginia.*

