APPRENTICESHIP TASK FORCE REPORT

Nanz Aalund

The Apprenticeship Task Force is working on curriculum and support materials to help jewelry businesses successfully take on apprentices with federal recognition and support. This report will present the work being done to take advantage of new legislation which focuses on supporting apprenticeships. Questions like the following will be answered: What is the legislature that can be applied to for benefits? What kind of support does if offer for apprenticeships? How can jewelry businesses access these supports? What is MJSA doing to facilitate federal recognition of our industry's needs, organizing frameworks, and developing curriculum to support training?

Nanz Aalund's wide ranging career as an author, designer, goldsmith, and educator began in high school jewelry arts class. After serving as a fine jewelry designer and marketing consultant for Nordstrom, Neiman Marcus, and Tiffany & Co., Nanz taught jewelry/metals classes as the "Artistin-Residence" at the University of Washington. She holds a Masters of Fine Art/Metals and a Masters of Education/College & Technical Teaching Curriculum. Nanz's most recent book, "A Jeweler's Guide to Apprenticeship" published by MJSA in 2017, received an AM&P Excel Awards in 2018. In 2023 the Cultured Pearl Association of America's (CPAA) International Spotlight Award was awarded to Aalund's Pearl Nebula on platinum necklace.



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INTRODUCTION

One of the jewelry industry's biggest problems identified in recent years has been finding qualified workers and training them. Once, one of our industry's most important paths to regenerating its workforce and passing on knowledge between generations of jewelers was the apprenticeship. In recent decades the apprenticeship system has struggled to exist in the jewelry industry, due primarily to structural misunderstanding and flawed implementation.

In this report I will present how MJSA with the apprenticeship Task Force has taken on the challenge of gaining federal recognition for our industry's need to train workers. I will show how MJSA's Education Foundation (referred to here on as EF) has organized training frameworks and developed curriculum to support jewelry training opportunities. With this report I will illuminate who the apprenticeship Task Force is, how it was assembled, and what they have accomplished. I will explain how individual businesses can participate and what the next steps are before companies can apply for benefits. Finally, I hope to show how providing training opportunities for employees as apprentices to learn needed skills can bring benefits to an entire jewelry business.

As was illustrated in the surveys conducted for the 2019 Research Award winning, Santa Fe Symposium® paper, "Jewelers: the Next Generation," many University/College jewelry programs were missing or severely under-taught the skill sets that jewelry businesses deemed as core requirements for work. Not enough "engagement hours" in educational programs combined with no set standards for technical competency were identified as leading factors contributing to the lack of work-readiness. Add to that there

are just too few job applicants seeking entry-level bench jeweler positions because of no clear path to career advancement. Often the case in public schools is that administrators will arbitrarily place restrictions on a department, or the lack of funding, equipment and space will leave a jewelry program lagging behind the needs of the industry. But, with jewelry programs being placed in art departments, we must also be aware of a systemic cultural bias against "art" in American culture. Art classes in secondary schools are often portrayed as being an easy "A" grade, when educators from other disciplines make jokes regarding the lack academic rigor present in art as a subject. Equally, there is a larger, cultural bias that projects a negative image onto "handcraft." The erroneous image of handwork being easily performed by unskilled, cheap labor, or as a hobby done by untrained enthusiasts for free, also factor into the decline in technical skill training.

While university degrees can provide a deep knowledge of any given subject and represent a wide range of problem solving and other transferable intellectual skills, an apprenticeship provides greater value to industry because of the focus it places on practical technical knowledge and real-world work experience that is expected when it comes to full-time employment in what is a demanding, highly skilled, craft profession.

As Charles Lewton-Brain and I first illustrated in our paper "Jewelers: The Next Generation," the lack of clear pathways to training, job entry, and career advancement are hurting the jewelry industry. Responding to the issues highlighted in our 2019 Santa Fe Symposium paper, Rich Youmans, Director of MJSA's Education Foundation, began coordinating new solutions. The Apprenticeship Task Force was established and the Mentor & Apprenticeship Program (MAP) developed to resolve these issues in two ways.

First, initiating apprenticeships will help to ease the "brain drain" that is plaguing the jewelry industry as increasing numbers of longtime bench jewelers retire, taking their knowledge and skills with them. MAP provides guidance for businesses to facilitate the transfer of knowledge and skills from veteran craft-specialist to new initiates. Secondly, MAP shows younger workers coming to our field that standards based, on-the-job training is available in a recognizable career path, something that many business experts indicate as being critical to attracting young people into the industry.

Over the course of 2022, thanks in large part to the support of a JCK Industry Fund Grant, Mr. Youmans as director of the EF,

identified the components necessary for the first program aimed at revitalizing a crucial aspect of the jewelry industry's recruitment and training regimen, the apprenticeship.

MEET THE APPRENTICESHIP TASK FORCE

Youmans connected with industry leaders, educators, and international colleagues to foster the work of the Apprenticeship Task Force.



Nanz Aalund, jeweler, educator, and author of the awardwinning MJSA Press book A Jeweler's Guide to Apprenticeships.



Ann Cahoon, jewelry department head, North Bennet Street School, Boston.



Ronda Coryell, a JA Certified Master Bench Jeweler and one of the world's most wellregarded experts on Argentium.



Mark Hanna, chief marketing officer of the Richline Group and a leading advocate for responsible and sustainable practices.



Andrea Hill, CEO of industry consultancy Hill Management Group and MJSA educational liaison.



Lee Krombholz, owner of Krombholz Jewelers, Cincinnati, and vice chair of the MJSA Education Foundation.



Charles Lewton-Brain, master goldsmith, author, and educator who won Canada's highest honor for craft, the Saidye Bronfman Governor Generals Award.



Anthony Mock, custom concierge jeweler and owner of Mock & Co., Monroeville, Pennsylvania.



Alan Revere, author, educator, and designer who ran the Revere Academy of Jewelry Arts for nearly 40 years and now directs a Facebook group with 20,000 members.



Adrianne Sanogo, a GIA Graduate Gemologist and education chair for the Black in Jewelry Coalition.



Joanna Joy Seetoo, program manager of jewelry manufacturing arts at the Gemological Institute of America, Carlsbad, California



Karen Smith, awardwinning designer and founder of We Wield the Hammer, a metalsmith training program for women and girls of African descent.

The Task Force met via Zoom multiple times in 2022 to discuss techniques, textbooks, video supports, and equity to guide training development. Task Force members, Alan Revere, founder of the Revere Academy, and Joanna Seetoo, program manager of jewelry manufacturing arts for the GIA, both made generous gifts of goldsmith training videos to be edited and used with the curriculum for skill training support during the apprenticeship process. Members Karen Smith founder of We Wield the Hammer, and Adrianne Sanogo, Education Chair for Black in Jewelry Coalition offered feedback for eliminating barriers and strategic insights on designing programs with equity and inclusion as core concepts.

Developed by Nanz Aalund, the Competency Based Occupational Framework (CBOF) and the Advanced Jewelry Apprentice (AJA) curriculum are founded on the only DACUM (data collection for curriculum development) specifically undertaken for goldsmith training in North America. This DACUM was conducted in 1994 by Charles Lewton-Brain in Calgary, Canada and was donated for Task Force use by Charles. In this way each member of the Task Force brought a wealth of information and a unique perspective to the planning and focus of MAP.

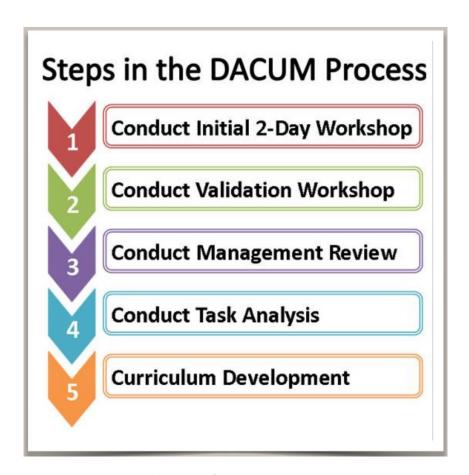


Figure 1: The DACUM process

INTERNATIONAL RECOGNITION

News of MAP gained international recognition in the summer of 2022 at the Initiatives in Art and Culture (IAC) conference in New York City. Invited by IAC director, Lisa Koenigsberg, I spoke on developing apprenticeship training and the MJSA Apprenticeship Task Force mission. Another speaker on the panel was, Ebba Goring, the Chief Executive for the Scottish Goldsmiths Trust. Ms. Goring shared that the Trust was in the midst of re-working their curricula to feature a first year devoted to technical training. Ms. Goring also offered an introduction to Peter Taylor, director of The Goldsmith Centre in London.

MJSA must have tapped a zeitgeist when it published the book "A Jeweler's Guide to Apprenticeships" because the Worshipful Company of Goldsmiths, London is also currently re-working

their curricula to include technical competency in their first year of training. With Youmans' approval I exchanged curriculum with the Trust and the Goldsmith Centre. This exchange revealed the MAP curriculum to be 95% aligned with the Trust and Goldsmiths Centre but actually surpassed both the Trust's and Centre's curriculum in rigor by including introductions to CAD and laser training.

WHERE WE ARE NOW

Phase 1 of the program launched in March 2023. With MJSA's MAP there is a new focus on presenting businesses with the educational and business tools needed to establish successful, effective, apprenticeships. It provides jewelers with the educational tools needed to bring on apprentice bench jewelers and train them to vetted industry standards. The first of these tools is a comprehensive training package that includes the industry's first Competency-Based Occupational Framework (CBOF), which cogently describes the functions of a bench jeweler's job and breaks each functions down into core tasks and expectations.

The second tool MAP provides is the Advanced Jewelry Apprentice (AJA) Curriculum. Utilizing well-respected textbooks, the AJA curriculum offers technical projects to achieve competency in each skill set and step-by-step guidance for the mentor or business owner to evaluate the apprentice's work. The Framework and Curriculum were then reviewed by the Apprenticeship Task Force. Comprised of renowned industry leaders, educators, and goldsmiths, the Task Force members rigorously examined each skill to be included as part of a goldsmith apprenticeship. The CBOF formatted in a style developed by the Urban Institute, is what the Department of Labor, Office of Apprenticeships will closely examine when considering MAP for federal registration.



A Jeweler's Guide to Apprenticeships by Nanz Aalund MJSA Press (MJSA.org) This book is free to program participants.



Professional Jewelry Making by Alan Revere Brynmorgen Press (brynmorgen.com) Print trade book: \$70

Digital edition: \$9.99



At the Bench, Vol. 1
by Gregg Todd and Greg Gilman
MJSA Press (MJSA.org)
Digital book available for free download
in MJSA Online Library for Mentors



Creative Stonesetting by John Cogswell Brynmorgen Press (brynmorgen.com) Print trade book: \$35 Digital edition: \$9.99



At the Bench, Vol. 2
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MJSA Press (MJSA.org)
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by Russell Lownsbrough FIPG and Danila Tarcinale FIPG The Crowood Press (crowood.com) Available through Amazon.com, local bookstores, and select industry distributors. Print trade book: \$24.99

Wax Carving for Jewellers



Illustration and Color Rendering by Adolfo Mattiello Freeman Mfg. & Supply Co. (dumatt.com) Available through industry distributors; go to dumatt.com/distributors.html

Techniques of Jewelry

Figure 2: The MAP textbooks

The Phase 1 training package also includes practical tests that businesses can use when interviewing apprentice candidates, as well as a short guide to establishing a shop culture that produces a high retention rate among apprentices.

The MAP package is free to registered participants and is augmented with an Online Resource Library. The library includes vetted instructional videos showing best practices for various bench skills, along with background information about basic metallurgy, gemstone characteristics, reclamation of precious

metals, safety guidelines, and other important topics. Both the curriculum and the online instruction have been educationally designed to satisfy the requirements for becoming a Registered Apprenticeship Program (RAP) under U.S. Department of Labor regulations.

The current apprenticeship system in the U.S., based on the 1937 National Apprenticeship Act (NAA), consists of two types of entities responsible for registering and overseeing Registered Apprenticeship Programs (RAPs). These entities include U.S. Department of Labor's (DOL) and the Office of Apprenticeship (OA) at the federal level, and at the state level with recognized State Apprenticeship Agencies (SAA). Both the OA and SAAs provide technical assistance and support to program sponsors, answer questions about the apprenticeship model, guide partners on each phase of developing a program, connect businesses to training providers, and advise partners on available funding sources to support apprenticeships.

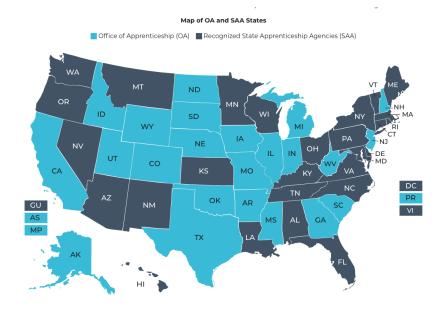


Figure 3: USA map showing OA and SAA states

Office of Apprenticeship

- Registers and oversees programs in states without a recognized SAA through state field offices. In some circumstances, OA may register a program in a state with an SAA
- Staff members are U.S. Department of Labor federal employees
- Registers all programs through standard documentation
- Utilizes the Registered Apprenticeship Partners Information Data System (RAPIDS) for registration, oversight, and tracking of apprentice progress and apprenticeship compliance

State Apprenticeship Agencies

- Recognized by OA to act on behalf of the federal U.S. DOL to register and oversee programs in their recognized state
- Staff members are state employees
- May utilize the standard federal paperwork and documentation, or may use documentation specific to that state
- May utilize the same RAPIDS system as OA, or may use a separate system unique to that state

There is a National Apprenticeship Act of 2021, which could provide additional funding in tuition grants for apprentices to gain specific technical training and tax credit supports for businesses committed to training apprentices. Unfortunately, NAA 2021 is currently stalled in the Senate with only a 4% chance of passing anytime soon. Businesses can act to put pressure on our Congressional representatives asking them to pass this legislation.

Workforce Innovation Opportunity Act is the other legislation that impacts apprenticeships by engaging local Workforce offices to help apprentices find training opportunities and for businesses to gain access to wage support programs.

Research reveals positive news in terms of job prospects for apprentices completing their training. One study found that a huge 85% of apprentices stay employed after completing training, with 64% of that number continuing to work for the same employer for more than 5 years post training (dol.gov). Both Canada and the U.S. have produced studies examining apprenticeship outcomes with the U.S. showing retention numbers as high as 85% and ROI of \$1.50 for every dollar spent. Canadian numbers reflect similar findings of up to 92% retention and ROI at \$1.48/ dollar spent.

Once MAP is registered with the DOL Office of Apprenticeship, participating businesses will be able to receive tax credits, wage match and tuition funding for the apprentice as well as other supports for businesses establishing apprenticeships through their local, State Apprenticeship Agency (SAA) and Workforce office.

Upon completion of the MAP, aspiring jeweler/goldsmiths will be eligible for Advanced Jewelry Apprentice (AJA) certification. This industry vetted designation and certification will signify a core level of standardized skill competencies that jewelers nationwide will be able to identify with pride.

NEXT STEPS

Phase 2 of this project will involve securing status for MAP as a federally registered apprenticeship program (RAP). The MJSA Education Foundation will also, pending needed funding, undertake the following initiatives:

- Promote the Advanced Jewelry Apprentice curriculum to spur the development of apprentice programs nationwide.
- Provide mentors with specific resources to establish effective apprenticeship opportunities.
- Communicate to younger generations the rewards of a career designing, making, and/or repairing jewelry.
- Reach out to trade schools, community colleges, and other educational institutions that are interested in using the curriculum as a basis for their own jeweler-training programs.
- Work with MJSA member schools to develop distancelearning opportunities for applicable elements in the curriculum, broadening access to related training and instruction for all aspiring jewelers.

It's crucial that our field raises awareness of jewelry career options to both those at the beginning of their careers as well as those who are looking for a second career. By promoting the benefits of a creative career as a skilled craft-professional in the jewelry field while also helping schools and businesses develop more effective jewelry-training programs, the MJSA Mentor & Apprenticeship Program will open multiple career pathways leading to opportunities in the jewelry industry workforce. With continuing enhancements to MAP tools and resources, which are available to both mentors and apprentices, will further revitalize the apprenticeship model and show aspiring jewelers a path forward to successful careers in the industry.

ACRONYM GLOSSARY

AJA = Advanced Jewelry Apprentice

BOK = Body of Knowledge

CBOF = Competency Based Occupational Framework

DACUM = Data collection for Curriculum Development

DOL = Department of Labor

JFF = Jobs for the Future

MAP = Mentor Apprenticeship Program

MJSA = Manufacturing Jewelers and Suppliers of America

NAA = National Apprenticeship Act

OA = Office of Apprenticeship

RAP = Registered Apprenticeship Program

ROI = Return On Investment

SAA = State Apprenticeship Agencies

SMART = Specific, Measurable, Achievable, Realistic, Time bound. Method for writing goals and objectives.

WIOA = Workforce Innovation Opportunity Act