SNAG neXt 2016 Education Dialogue Student and Educator Initiative

On Friday, May 20, 2016 the SNAG neXt Education Dialogue addressed some current questions facing many of us. The event brought together all levels of educators and students from every aspect of the jewelry and metals field. This included those involved with teaching studios, art and craft centers, high schools, colleges and universities. The event featured small group sessions, moderated by volunteers, to brainstorm and share ideas. The event was followed by the Educators' Happy Hour Mixer immediately after to allow participants to continue the dialogue and talk with others who share their passion for teaching and learning.

A special thank you to Pheonix Booth who transcribed all of the answers and notes taken by the participants!

Thank you again to all the participants for your participation and your expertise! If you were a participant, jotted quick notes, and would like your answers expanded or elucidated, please send an email with the question number, answer number, and your edited version to vlansford@snagmetalsmith.org.

Question 1

As interest in metalsmithing and jewelry-making increases, particularly the DIY movement, there is an increased competition among places to learn. Still, some programs, particularly college/university programs, struggle with studio costs and keeping the doors open.

• How do students find out about your classes, program or school? Do you or your institution/school/center/teaching studio/program/classes have a long time reputation, a strong social media presence, loyal following, or great word of mouth marketing?

• Where and how might you increase enrollment? If you are a student, what made you pick where you study.
1. University of Washington, Seattle, no longer has an MFA program.

2. Lisbon, Portugal (got) rid of their day program in favor of night time courses for working adults.

3. More competitive programs and cheap programs promote enrollment

4. History program - build(s) list of opportunities available and skills required/will be earned by pursuing that particular degree

5. Difference in student experience between non-credit institutions can be a negative draw. Specific institutions draw specific crowds. Not necessarily competing with those if you offer different broader programs with concept skill focused programs. Not appealing to same students. More appreciation for local handmade objects. People will want to make things themselves.

6. Rising tide lift all boats. Schools should work together on this issue.

7. Location handy

8. Quality of program

9. Small class size

10. Work with local high school with metal programs

11. Joint HS/college credit for a gateway class

12. Community outreach at festivals/art weekends hands on art opportunities

13. Night classes for adult students

14. Open up classes to non-metal majors

15. Don’t force art students to declare metal major so early

16. List jobs that need the skills a metalsmith learns not just metal skills

17. Grassroots approach; social media and craft show (local) presence Free programs, connections. Part of mission to offer access point to the craft Vacant lot next to space - offer interactive community events. Cuttle casting and spoon forging, resulting in press and an engaged community.

18. Small town jewelry workshops - community communicator - press social media. Very active presence in community = positive response, people like to use their hands!
19. Software developer - want MFA, but family care takes priority. Time concerns - how to manage supporting family and earning degree? Desire practice, concept development, sense of community. Taking workshops is an alternative - and spend studio time. Approach fellow metalsmiths and ask for mentorship. Teaching w/o masters is possible. Proper university setting can be restrictive. You are on your own - develop own voice. Idea of masters is to be intensively working. You must be a full time student!

20. Open classes to non-art majors. Pros and cons creative approaches from engineers etc. less [illegible] solutions from those who have no experience in art.

21. Not select major until junior students get very diverse experience in other mediums and are encouraged to try all mediums. Bring experience and experiments to metals while deciding on major.

22. Recent grad - jewelry experience in high school, wanted a program with art focus as well as academics. Vital such as history of craft making processes. Maine college of art. Location, quality of program, intimate size, decent scholarship, help from faculty in securing job in field. Assistanceships at craft school also helped secure opportunities.

23. Small program - no grad. How to recruit at H.S. level, no scholarship level. Winthrop U. there are metals programs in high school - outreach? Problem with exposing kids to the real world of metalsmithing promote understanding. Could parents be the hurdles? Offer classes that function as interchangeable high school/ college credit.

24. Baltimore jewelry - issue of no marketing money. Community outreach. How can people access the jewelry world? Combating preconceived notion or intimidation of art school idea

25. [illegible] transferred from other art classes to metalsmithing Lill street excellent marketing

26. No direct marketing, now marketing scattered.

27. Metalsmith coffee house - tour of studio helpful

28. High school art painting and ceramics

29. No one started in high school

30. In college no business courses

31. Metalsmithing one of many electives - this class appealed to engineers
32. Marketing - internet - color- $300 two x 1 year. Word of mouth. Advertise with media that reached the greatest population.

33. Affordable community classes in a community arts center, especially for people who are not interested in the university model. Good place for introduction. Jumping off point for students who want to learn more - [illegible] to other classes

34. Maker fairs/ portable (outside demos at farmer’s markets, community events/ engagements

35. Community day supported by college foundation, one day all free workshops - informing and engaging- one monthly email with w/2 upcoming months calendar of events

36. Telling students that this is a viable career choice, different ways to express your talents, different jobs within the field, job possibilities with in the skill set, especially in the intro classes ➔ comprehensive website with alumnae successes, realizing that undergraduate education doesn't predict career final choice; internship opportunities.

37. Word of mouth through promotion of your students success - sharing that with the world through marketing - word of mouth videos/stories/emailing/newsletter of success

38. Promoting (illegible) classes at other schools

39. Doing maker fairs and hands on demos

40. Community days one day free workshops in a classroom

41. Monthly email w upcoming month curriculum

42. University challenge - can’t be an artist when you’re in graphic design. What do we educate?

43. Educating that we can make cameras as a maker. Address as broad of the spectrum as possible. It is all a part of the field.

44. There are lots of job possibilities since we are hands on. Speak out! Represent your work - take students w/ you when you speak or promote

45. Ability to speak about your work

46. Comprehensive website

47. Beginning - community centers - short classes/workshops - open house/sales - reputation - city puts out schedule - preexisting reputation
48. Portable maker fairs/events
49. Social media
50. Young metalsmiths
51. Community days
52. Take as an exploratory course
53. See (illegible) as the only path to employment
54. How can programs address the employment options
55. Larger (illegible) problem solving skills
56. Information - web sites - promoting, potentially directions professionally
57. Internship
58. Students voice: following teachers work, random choice and fell in love university departments don’t communicate
59. Private universities: night to share Collab/demo night student led jewelry club
60. Maker space: find on google, website, skills needed in community
61. University: keep in contact after
62. Facebook sucks Instagram good
63. Across majors in college: Collab nights to find out about another artist’s media
64. Maker space: informative website experts on staff membership fee to work there
65. Post grad relationships as simple as email
66. Instagram
67. Work from graduate program/staff - expanding offering
68. Scad - Collab night
69. ECU - foster graduate relationships email
70. Start major as a junior offer up intro classes to non-majors
71. Cuttlefish bone casting in parking lot to engage people who might not understand
72. Maine college of art: wanted to major in metals. Wanted a program w/ strong academics. Found drive to look for program. She loves learning from a person. Small school

73. Winthrop SC: 5,000 student's AP/college credit in high school

74. Baltimore jewelry center: spending, no budget for marketing potential ways to attract new students grass roots it. Put yourself out their social media/event/table with info

75. University programs telling new students about program

76. Been attracted to a program w/ a professor that uses contemporary materials

77. Attracted by work of past professors and students

78. Word of mouth by other students - through other departments and school relationships

79. Work with other departments to increase participation

80. Studio tours

81. Host a workshop & invite students in other areas

82. Incorporate new technology

83. How to find maker space - google searches for 3D printing

84. Social media

85. Incorporate at occupational trades (welding) people doing career changes

86. Promotion at scholarship opportunities

87. Social media stuff

88. Facebook pages/groups for university groups

89. Alumni promoting school in everyday activities

90. Hash tags

91. Discovered MFA program by looking on snag website

92. Chose a grad program based on work of instructor

93. Discovered metalsmithing program while major in another media and switched

94. Need to collaborate between programs at universities (like SCAD) often fashion or fibers don’t even know that metal exists
95. Word of mouth, social media
96. Maker spaces, technical trade schools
97. Why don’t universities promote programs
98. Students make incredible connections around the world through Instagram
99. Student Urbana Champagne → transfer from painting LIL student arts center
100. Funneling of students into programs from high schools
101. Social media awareness
102. Studio tours
103. Lack of funding in the arts is a current concern
104. Exposure to multiple disciplines as a path to metals
105. Word of mouth print advertisements art publications
106. Access to registration and facilities
107. Transfer students from other disciplines
108. Lots of try it do it
109. Happenstance and coincidence
110. University of Illinois Champaign
111. LIL street gallery
112. Graphic design
113. Computer animation
114. Illegible
115. Students starting out as an art major - they fall in metals as part of their foundation training (if the college has a metal program) by being required to take a metals class
116. Lill street has good word of mouth marketing an art center in Chicago
117. Social media - metalsmiths coffee forum etc. - people are looking at social media to learn more
118. But it’s be good to try...
119. Working with high school teachers to bring metals in, but money/funding is tight. “But safety precautions is a complex thing to integrate/get approval for by the schools/state.

120. Northern Michigan university - they take their students into one week workshops to expose them to new mediums.

121. What about BFA MFA programs do they teach any business classes?

122. Steven Donnelly - people are coming to him/his school to learn → takes out an ad in the local arts magazine → he gets powered by the arts magazine SEO power → but again he does it through word of mouth.

123. Students often don’t hear about metals intel they hear word of mouth or accidentally fall into a course.

124. Social media is commonly the strongest way of advertising.

125. Use tours and visits to help show HS level kids their options.

126. (Illegible) help word of mouth strengthen.

127. Form partnerships with other departments.

128. Inform student about how metals strengthen their business sense, lifestyle etc.

129. Advertise in local papers and magazines.

130. For social media - be aware of hashtags and keywords.

131. (Recent graduate) jewelry class in high school, location and quality of program small size of old school appealing production jeweler.

132. Don’t know how to increase enrollment at the high school level.

133. Exposing students more to metalsmithing photos and techniques.

134. Baltimore jewelry center marketing dollars and budgeting.

135. Reaching out to the community (illegible)@ on grassroots - social media - shows and events - cuttlefish casting events - demonstrations.

136. Press opportunities - showing the public what is possible.

137. Need for night classes.

138. Taking workshops and go to bed in the studio and work your ass off.
139. Finding a mentor in your area

140. Grad programs - your just on your own anyway

141. Low enrollment opens up programs too non-major’s w/o fundamentals

142. Not claiming majors until junior year and just covering fundamentals in first and second years

143. Maine college of art - opening up a night program completely changed the demographic of enrollment

144. Portugal university - non degree programs - working with other facilities in the area

From Pheonix Booth, the SNAG volunteer who compiled all of these many answers!

I would love to answer this question as it has been on my mind much since beginning the search for a graduate program. I feel like a user friendly searchable database of schools and exactly what they offer would be a beginning for people already interested in metalsmithing. I also think that a detail of processes and the aesthetic of the department would help greatly. For me in particular I want a school that does large scale aluminum casting and experimental bronze casting, I am also looking for a school with the freedom of combining media specifically ceramic and fiber with metal. As an undergrad I had no idea the metalsmithing department even existed until I happened to need some art credits. It changed my life, literally, and consumed my trajectory in college. As for recruiting incoming freshman to a program they would need to know it even exists and that would require making intro to metals a core class or something at the high school level. I feel like each media offered by a school should have their intro class as a requirement for students that know they want to do art but have yet to find their voice/preferred media. – Pheonix Booth

Question 2

In traditional college settings, copying another artist’s work and passing it off as one’s own is considered plagiarism and usually results in some form of punishment, such as a failing grade or expulsion from the class. Nowadays with the proliferation of images online, it’s nearly impossible to be aware of all the sources that could be copied and passed off as one’s own. In continuing education classes, it’s become quite commonplace for students to use other artists’
work as design material (not merely as inspiration) with no awareness that this is an ethical
and legal problem.

• How do you help students understand the problems of copying other artists' work?
• How do you help them learn the difference between outright copying and in making
specific class projects in the tradition of “copying the masters” as artists have
legitimately done to learn for centuries?

1. [several people indicated] Experiencing the opposite problem - students don’t want to
make work if it resembles others work

2. Lawsuits

3. [several people indicated] Maybe this addresses issues taking place outside of
academia

4. Powerful theme this conference of authenticity

5. [several people indicated] In schools this is an addressed issue

6. Some don’t have it in them to copy designs

7. [several people indicated] Going over this in academia - copyrights?

8. [several people indicated] Teachers should be teaching ways to think about design and
sketching techniques

9. [several people indicated] Needing a solution to the problem of not being able to draw
-some students solve that problem by copying - so provide a solution that works - using
copying from classical and very old masters

10. Shutting it down way early so the mentality of copying [thought unfinished]

11. Lobbying legislators to make copyright lawsuits affordable

12. Educating buyers about authenticity

13. Casting from discreetly made things, like toys

14. [several people indicated] Masters - taking master work and recreating it in a personal
style

15. [several people indicated] Copying techniques not intellectual design work
16. Forming an organization that can band together and to take on lawsuits on behalf of artists

17. No photography in trade shows

18. Legitimately copying, almost like pattern making - techniques versus pattern

19. *[several people indicated]* Artists have always copied each other - time, timeline. Master studies

20. Books as slow learning, drawing and the importance of drawing out ideas

21. *[several people indicated]* Nothing new under the sun

22. *[several people indicated]* Importance of having conversation in school. Where the distinction with intellectual property [thought unfinished]

23. *[several people indicated]* DIY community, communities not believing in intellectual property

24. Own voice, the own language, artists who develop their own story - integrity

25. Pervasiveness of design inspiration - same TV, fashion, similar aesthetic, similar language

26. The proliferation of how to do information for specific projects to copy. Does this create a confusion of when it's not appropriate to copy an artist's work?

27. Loss of ethics in art

28. *[several people indicated]* In education it's part of teaching the copyright and ethical issue.

29. Under distinction between copying for learning and passing it off as your own (make a clear distinction)

30. As makers we are assuming that everyone knows not to knock off someone else's work

31. People are used to knock offs at anthropology or at clothing stores. They've been taught that simply making it makes it your intellectual property.

32. How much work has to go into a piece to make it unique?

33. *[several people indicated]* ECU has an academic integrity policy - that is all students are aware it is a part of the school conduct that students cannot copyright. (?)
34. Presentations at the beginning of the year

35. As a professor teacher teach/coach or you can be punitive

36. [several people indicated] Is it worth it to follow up with legal punishment (cost time effort) or is it easier to just move on to bigger better ideas?

37. [several people indicated] Appropriation VS copyright 3 rules -steal -alter -appropriate

38. [several people indicated] University setting is so different from community classes. - still important to mention copying to community classes

39. [several people indicated] As a professional keep moving forward so copiers are always behind

40. [several people indicated] Teach original design equal to or greater than techniques only

41. [several people indicated] Alter appropriately and significantly -3 changes +

42. [several people indicated] Academic integrity

43. [several people indicated] Assignments are assigned and students are encouraged to find some “master” of the style for inspiration - but create with personal twist - emphasis on self-creativity

44. Cases of copying are prevalent

45. Exacerbated by social media

46. [several people indicated] Often when you’re taking a workshop your learning the artists/designers techniques -so where do you go from there?

47. Copying a pinback?

48. Using Pinterest as inspiration to make something of your own

49. Michael Sterling article/paragraph in art jewelry that addresses creative/unique work

50. [several people indicated] Not for credit students may find it more intimidating to delve into the creative process/ create a design

51. Simultaneous invention: sometimes your work will be similar and look like another’s work

52. Juxtaposition
53. Self-originated design concepts

54. [several people indicated] Educating maker’s/workshops attendees on what copying is

55. [several people indicated] This idea addresses a less academic environment - professors are aware of their field -can recognize copying in their student’s work

56. [several people indicated] Emphasis on finding your own voice -truly authentic. If you truly follow your voice, your piece will be different no matter what. Instill authenticity! Hobbyists are the true problem professors’ job is to not allow this to happen. people that are self-taught from non-art backgrounds don’t feel capable of original designs easier to copy

57. [several people indicated] Issue of integrity and morals! As someone is making money off of it, that’s a problem. -taking what you like about existing objects and make something. People don’t understand that copying is wrong.

58. [several people indicated] Not just a teacher’s job to teach creative skills -teach creative thinking sketchbook techniques etc. hobby realm fear of creativity. Attitude of “I just want to make this so I will.”

59. [several people indicated] “I can’t draw...I can’t” is a problem needs solution. Turn to historical motifs? Artists are dead no longer dependent on an earned living from those images. You are copying something but changing the applied medium form etching to metal. Start from this source and alter it change exploration different approaches.

60. [several people indicated] Is copyright a solution? Violation of a law a drawback? You can’t afford to fight something like target when they want to steal your design. Still assert that this is an issue outside of the university education realm.

61. As an artist in school it is understood that you know how to develop a creative process. Sand casting -direct replication of a found object once you purchase an object and alter it, it becomes something else. It changes context.

62. Working “in the style of” someone. Technical exercise at times theme and variation.

63. [several people indicated] Major problem with big corporations stealing at will. Too much money can’t fight it. If it shows up in Walmart there’s nothing you can do.

64. [several people indicated] Is there anything new under the sun?

65. What is plagiarism in art
66. [several people indicated] Not addressed in classes in school

67. [several people indicated] DIY movement is it original

68. [several people indicated] Integrity

69. Copy designs

70. Report to ETSY

71. [several people indicated] Teach a class - students are copying instructors work

72. Have discussions about using the work of others for inspiration - what do you like about that design

73. Read and provide statement about what violates copyright laws.

74. [several people indicated] Find more problematic with no credit students

75. Teach students to replicate with restrictions so the students understand the difference.

76. [several people indicated] Encourage the design to be individual or to recreate or rework a technique or style

77. [several people indicated] Teach emulation, teach appropriation, teach referencing

78. [several people indicated] Teach them to decide why they like the work they are duplicating

79. Get students to get past the intimidation of their own work

80. Encourage colleges (illegible) ...on copying (other areas of the arts for example)

81. [several people indicated] Self-originated design concepts

82. Classes I’ve taken had no direction to use outside “inspiration” of copying other objects

83. Online, speak to the culture of “original content”, encourage finding and advertising the original creator.

84. [several people indicated] Universities’ academic integrity policy

85. Each student to make original work
86. Projects designed to teach techniques - workshops- make students understand the 
(incomplete thought)
87. Legal stuff
88. [several people indicated] If someone is copying you -keep moving forward!
89. Require research, sketches, in progress critiques to help catch any potential problems
90. Teach students how to design something! -how to get inspiration/info
91. [several people indicated] Teach appropriation!
92. Steal obscure material
93. [several people indicated] University handbooks -code of conduct
94. Encourage students to take a new direction
95. Because of social media images are shared instantaneously it’s all out there
96. [several people indicated] Teach students that plagiarism is immoral and illegal
97. [several people indicated] Teach about appropriation
98. Coach for creativity
99. Speak to their career needs if you plagiarize you may get fired.
100.Create projects that utilize original research resources
101.Speak of “quoting” an artist an homage
102.[several people indicated] Academic integrity program. All students orientated.
103.[several people indicated] It’s going to happen -you can teach and or promise but 
expensive to sue
104.[several people indicated] Keep moving forward
105.Remind people to attribute to artist
106.Acknowledge appropriation steal alter
107.[several people indicated] Mostly if student’s ideas get close to someone else design 
or idea they don’t want to touch it
108.Make some students know the field
109. The melancholy anatomy of plagiarism a small book which deeply discusses the plagiarism problem is it even possible to produce original work?

Question 3

Do traditional and nontraditional art and craft programs have an obligation to prepare students as potential professionals in the field?

• If so, in what ways do you do this?
• If not, why?

1. Resume writing, contracts
2. Design a production line
3. What is your universities function, or a craft centers mission?
4. This is a profession with lots of different career options, how do you teach it all?
5. It’s important to prepare students to be professionals to maintain integrity of school’s field
6. If not the whole thing is a fraud
7. I lecture on business
8. Learned business on the internet by finding information
9. Students taking class just as elective
10. Small business administrator’s free courses
11. Programs require writing grant, submitting to shows
12. Jewelry photography classes
13. How to price your work? Class
14. Discussion on taxes
15. Apprenticeships
16. Yes, some do learn this already
17. Making 5-year plan early on to tailor the academic experience
18. Professional practices class
19. SNAG has some programs geared toward mentoring students
20. Offer jewelry photography courses
21. People who work with buyers’ market
22. Working with emerging artists for pricing and (illegible) mentoring
23. Covering taxes and fundamentals of business practices
24. Master/apprenticeship relationships and learning from a professional w/ active business
25. Contract and resume
26. Grant writing
27. Class: hand crafted entrepreneurship
28. Senior seminar
29. Gallery contracts for money for damaging
30. Certificate of insurance
31. Yes, teach classes on production, professional practices
32. Offer opportunities for them to have professional learning experience
33. Sponsored projects, internships
34. University art school “we are not obligated to teach anything but art”
35. University “we are not a trade school”
36. Former professor “I taught my grad students about contracts, resumes, insurance etc.”
37. Professional practices class
38. Visiting artists
39. Career options discussed
40. Internships
41. Warn about challenges
42. Difficulty in knowing what path a student will take so difficult to determine how much more beyond what colleges are already doing to prepare students

Question 4
In what ways can SNAG help support and sustain metals and jewelry education? We’d really like some specific ideas and solutions here!

1. (several people indicated) Pair students with mentors in the field
2. Pay the way of a student to come to conference and or a mentorship - kind of like the scholarship, but with mentorship
3. Sponsoring demonstrations in studio spaces
4. (several people indicated) Visiting artists to universities or workspaces w_studios
5. An email exchange of demo visiting artists
6. Want-ads -students seeking mentorship or vice versa (springboard)
7. (several people indicated) Student caucus or meetup w_snag board -sign up students as members
8. 1st day networking for meetup for students and mentors
9. Pairing a student with a mentor ice breaker
10. Internship resource list
11. More samples of standardized contracts
12. Transcripts of lectures/workshops
13. Less overlapped content
14. (several people indicated) Pair students with mentors
15. (several people indicated) Sponsor a student -by mentor
16. (several people indicated) University sponsor visiting artist
17. (several people indicated) Student caucus -meeting the board and expressing needs increase student participation and nurture new members
18. Get international?
19. (several people indicated) Help organize visiting artists in maker and studio spaces
20. Appeal to students who want to work in the jewelry world that aren’t makers
21. There isn’t enough understanding with the interdisciplinary world
22. (several people indicated) More, smaller conferences more intimacy
23. Student financial support
24. Provide education materials - use wide member base to create database of handouts. Advice from master
25. (several people indicated) Establish meet and greet (local level) between students and established metalsmiths
26. (several people indicated) Different types of conferences larger and then more intimate
27. Provide community
28. Sponsor financially workshops
29. Reaching out to high schools
30. Partner with local organization to provide programs
31. (several people indicated) The society of arts and crafts would love to do a “Boston Mixer” or meet and greet on the local level
32. (several people indicated) Pairing students with mentors in the field
33. Job opportunities posted
34. Digital archives of work. Database of technical information
35. Database of other resources; transcripts of lectures, handouts, suppliers, videos a youtube channel
36. I think these sessions are informative but my group was 90% instructors and student feedback was limited
37. Perhaps having a roundtable session where students can contribute or ask questions that SNAG can help support
38. Scholarships to SNAG
39. Reduced student costs
40. Online educational video library
41. I discovered the grad school I will be attending through snagmetalsmith.org
42. I would like to see the workshops/lectures @ SNAG conferences to be more directed toward spreading knowledge. Some speakers simply talk about their work and journey in the field - they are preaching not teaching
43. Make the conference schedule in a table. We are visual artists I want to visualize the schedule
44. Internship/assistant hookups online
45. (several people indicated) Standard contacts vetted by a lawyer. Galleries, commissions
46. Info pricing separate forms
47. Transcripts from conference talks
48. Compiled slideshow, notes, resources from the conference
49. (several people indicated) Pair students with mentors in the field
50. (several people indicated) Organizing/coordinating visiting artists could be a logistical challenge
51. Maybe create a forum/or network online, like an online bulletin board - student looking for mentor
52. Maybe have forum where students can reach out about what they need
53. List of best practices
54. Providing networking opportunities/ like a similar small break out group concept to this educator’s dialog. At the beginning of conference.
55. (several people indicated) Ice breaker at conference
56. (several people indicated) Help with a mentorship program to pair students with mentors
57. (several people indicated) A student caucus to work w/snag and how that membership can be created
58. (several people indicated) A meetup for students and mentors
59. (several people indicated) Standardizing contacts, or post samples of contracts of different kinds; commission, consignment
60. Samples; how to price products
61. Wiki; where we can add info
62. Continue to educate about business
63. Resources
64. Transcribe lectures and post
65. Reorganize conference schedule
66. Ask gallery owners to be involved in a Q&A or to speak
67. Grant writing
68. Exhibition proposal how to write
69. Writing how to write an artist statement
70. (several people indicated) SNAG can plan and organize an event to network shops and artists to mentor or apprenticeships; just to put these people together.