## Visions Week 4: Mathematical Inqu[ee]ry

## November 16, 2021

## Video Transcript

Note: This transcript was automatically generated via Zoom, please reach out if you spot any errors.

1
00:19:16.860 --> 00:19:20.820
Brandie Waid: All right, Hello everyone how are we doing tonight.

## 2

00:19:24.690 --> 00:19:32.400
Brandie Waid: hey brandi doing well, thanks, how are you hey good thanks i'm doing alright as well, that my hot chocolate, so all as well.

3
00:19:35.370 --> 00:19:39.990
Brandie Waid: Right so trina you haven't been here before, so I want to do an introduction.

4
00:19:41.520 --> 00:19:44.460
Brandie Waid: So if we could all just say who we are.
5
00:19:45.840 --> 00:20:04.020
Brandie Waid: Our educational context and a show or movie or something that you watch recently that you found enjoyable so i'll go first i'm Randy.

6
00:20:05.490 --> 00:20:06.810
Brandie Waid: pronounce she her as.
7
00:20:08.610 --> 00:20:10.800
Brandie Waid: My educational context is he.

## 8

00:20:12.000 --> 00:20:19.200
Brandie Waid: Is a map consultant or coach as well as the founder of radical pedagogy Institute for professional development organizational for teachers.

## 9

00:20:21.360 --> 00:20:29.640
Brandie Waid: And I recently finished watching the last season of pose which made me very sad that it was over, but also brought me a lot of Jill.

10
00:20:40.440 --> 00:20:41.940
Brandie Waid: dump it and whoever wants to go next.

## 11

00:20:44.640 --> 00:20:45.210
Dewey Gottlieb (he/his): hi everyone.

12
00:20:46.590 --> 00:20:50.460
Dewey Gottlieb (he/his): Do we got leap I trina is this thanks for joining us to see if.
13
00:20:51.990 --> 00:21:01.770
Dewey Gottlieb (he/his): We can avoid Department of Education and educational specialist currently i'm in the assessment sections like I am the state coordinator before this I was the.

14
00:21:02.940 --> 00:21:07.620
Dewey Gottlieb (he/his): State math specialist so I worked in the curriculum and instruction side for 10 years.

15
00:21:08.760 --> 00:21:12.600
Dewey Gottlieb (he/his): I was a high school math teacher for about 14 years before that and.

16
00:21:14.820 --> 00:21:22.800
Dewey Gottlieb (he/his): Something I watched well, I mean well yeah last night I watched the we're here HBO show with.

17
00:21:25.020 --> 00:21:26.190
Dewey Gottlieb (he/his): drag queen chance and if.

18
00:21:27.570 --> 00:21:29.730
Dewey Gottlieb (he/his): you read that which I basically.

## 19

00:21:31.260 --> 00:21:37.080
Dewey Gottlieb (he/his): I don't I shouldn't be surprising was like how I some to some degree tear up.

20
00:21:38.190 --> 00:21:39.810
Dewey Gottlieb (he/his): Every single episode.
21
00:21:41.220 --> 00:21:44.040
Dewey Gottlieb (he/his): But anyway, so that's what I watched last night actually was fun.
22
00:21:50.220 --> 00:22:01.230
Steph (She/her; treaty 6): Katerina i'm stephanie and stuff is fine, he or she her pronouns and ei K to 12 teacher and also a Grad student in Canada.

23
00:22:03.270 --> 00:22:17.460
Trena Wilkerson (she/her): Right excellent great to maybe everybody i'm trying wilkerson she her I am math professor at baylor university and i'm also President and cto and former High School math teacher taught.

## 24

00:22:18.480 --> 00:22:31.770
Trena Wilkerson (she/her): 18 years do we just a little bit longer than you and so and I can't even think imma watch mostly reruns because I don't have time to sit and watch watch a lot of TV, so you know.

25
00:22:32.940 --> 00:22:41.610
Trena Wilkerson (she/her): Not too much, I did go see a movie not long ago, but now I can't even remember the name over so I don't know what that means it didn't make an impression or i'm just too tired to thing tonight so.

## 26

00:22:43.290 --> 00:22:46.080
Brandie Waid: What what's your favorite a rerun lot.

27
00:22:46.770 --> 00:22:55.860
Trena Wilkerson (she/her): Oh, I like to watch all the ncaa is law and order and special victims unit and things like that, and so just watch a lot of those.

28
00:22:56.640 --> 00:22:59.580
Brandie Waid: Other procedurals that are like super cheerful and happy.
29
00:23:00.810 --> 00:23:01.710
Trena Wilkerson (she/her): So I went now.

## 30

00:23:02.610 --> 00:23:05.640
Brandie Waid: That all the procedures that are super cheerful and happy.
31
00:23:07.140 --> 00:23:08.130
Brandie Waid: they're all murder.

32
00:23:08.970 --> 00:23:15.720
Trena Wilkerson (she/her): yeah there yeah gotcha they're they're not they're not just sometimes I have to stop watching them because I get too many of them and I go okay i've had enough of this.

33
00:23:16.080 --> 00:23:24.390
Trena Wilkerson (she/her): You know so but also like SCI fi that's my that's my distance away from reality that's what I really like as well, so.

34
00:23:25.740 --> 00:23:36.600
Brandie Waid: Thank you, Nice well, thank you all for it i'm entertaining my silliness oh there we go okay JESSICA is joining us accidentally kicked her out.

## 35

00:23:37.290 --> 00:23:38.130
Brandie Waid: He is late.
36
00:23:39.120 --> 00:23:42.600
Brandie Waid: So I JESSICA, can you hear us.
37
00:23:47.040 --> 00:23:47.520
Brandie Waid: Lady.

38
00:23:54.120 --> 00:23:54.690
Brandie Waid: hey.
39
00:23:55.770 --> 00:24:04.170
Brandie Waid: So we were just introducing ourselves, we have a new attendee Dr wilkerson so you oh my gosh friend, just so good.

40
00:24:06.090 --> 00:24:07.890
Brandie Waid: To see self and say.
41
00:24:09.180 --> 00:24:17.700
Brandie Waid: Educational context and we're also saying something that we had seen recently in TV movie whatever that we enjoy.

42
00:24:20.580 --> 00:24:21.270
Jessica Lee: Okay hi.
43
00:24:21.330 --> 00:24:23.610
Trena Wilkerson (she/her): And during the call me train i'm sorry JESSICA.
44
00:24:23.670 --> 00:24:25.650
Trena Wilkerson (she/her): Your trainer she introduced me that way.
45
00:24:25.650 --> 00:24:25.800
But.

46
00:24:27.480 --> 00:24:29.340
Trena Wilkerson (she/her): i'm so glad to meet you too, so.
47
00:24:31.050 --> 00:24:37.650
Jessica Lee: hi i'm out in California near San Francisco just south of San Jose i'm in San Jose.
48

00:24:38.760 --> 00:24:47.340
Jessica Lee: I teach in a middle school classroom I teach eighth grade math this year it's grade level math but i've taught algebra and geometry previously.

49
00:24:49.020 --> 00:24:56.670
Jessica Lee: sorry about my tech issues i'm using a district borrowed computer, and so the account looks suspicious I understand being removed and.

## 50

00:24:57.330 --> 00:24:57.780
Brandie Waid: That caused.

51
00:24:58.020 --> 00:24:58.770
Jessica Lee: a bigger problem.
52
00:25:01.950 --> 00:25:04.620
Jessica Lee: What am I watched recently I don't really watch TV.

## 53

00:25:06.360 --> 00:25:08.910
Jessica Lee: I read a read.

54
00:25:10.170 --> 00:25:11.250
Jessica Lee: yeah I do like to read.
55
00:25:12.120 --> 00:25:12.570
Brandie Waid: I read a.

## 56

00:25:13.080 --> 00:25:14.280
Jessica Lee: Book recently.
57
00:25:19.500 --> 00:25:21.840
Jessica Lee: it's called from burning to blueprint.
58
00:25:24.840 --> 00:25:25.260
Brandie Waid: he's.

## 59

00:25:26.730 --> 00:25:27.600
Jessica Lee: He wrote about.

60
00:25:28.770 --> 00:25:30.180
Jessica Lee: Also at the Tulsa massacre.

## 61

00:25:32.370 --> 00:25:36.630
Jessica Lee: his ideas about how rebuilding that kind of.

62
00:25:38.250 --> 00:25:46.470
Jessica Lee: Wealth would work in today's world as part of it is like mom and pop stone like brick and mortar mom and pop shops don't.

## 63

00:25:47.430 --> 00:25:58.470
Jessica Lee: They don't have the same effect in a Community anymore, especially with technology, you can have global or whatever REACH and so it's not just like we need more mom and pop.

## 64

00:25:59.220 --> 00:26:11.010
Jessica Lee: Community businesses it's like how to build wealth in today's world, which is very different from when this when when Tulsa was when Greenland was burned down.

65
00:26:11.550 --> 00:26:15.240
Brandie Waid: Right very cool I just wrote it down so he got on my list.

## 66

00:26:16.410 --> 00:26:16.680
Jessica Lee: isn't.

67
00:26:17.160 --> 00:26:19.410
Jessica Lee: it's not each letter reads and stuff i've read.

68
00:26:20.580 --> 00:26:23.370
Jessica Lee: I don't want to say light like it's light topic, but it's much easier to.

69
00:26:24.630 --> 00:26:29.520
Brandie Waid: yeah that's awesome Thank you cool well thanks for.
70
00:26:29.520 --> 00:26:31.260
Brandie Waid: Sharing and introducing.

## 71

00:26:31.830 --> 00:26:36.210
Brandie Waid: yourselves so just a reminder, and these are our Community norm.
72
00:26:37.740 --> 00:26:40.350
Brandie Waid: The ideas of the five tenets of a brave face.
73
00:26:40.410 --> 00:26:46.920
Brandie Waid: controversy with civility only intentions impact challenged by choice, respect and no attacks.

74
00:26:47.760 --> 00:26:59.460
Brandie Waid: And then the rest, I was what we said that would look like work collaboratively and provocative yet caring feel comfortable comfortably uncomfortable stingrays to ourselves and others.

75
00:27:00.330 --> 00:27:06.180
Brandie Waid: embrace cognitive dissonance Center COM and feeling and following the 42nd role, try to make space for new voices.

## 76

00:27:07.890 --> 00:27:11.430
Brandie Waid: If there are any of those that we feel like we need to revisit.

## 77

00:27:12.510 --> 00:27:20.670
Brandie Waid: Please let me know you can shoot me an email or right in the feedback form at the end, and then we can revisit or add whatever.

## 78

00:27:22.350 --> 00:27:27.900

Brandie Waid: Moving forward for our last two weeks after this bonkers.
79
00:27:29.130 --> 00:27:31.350
Brandie Waid: Just went by so fast so.

## 80

00:27:32.520 --> 00:27:32.910
Brandie Waid: All right.
81
00:27:34.020 --> 00:27:48.420
Brandie Waid: So one of the things that we were working on last week was looking at Dr yay and rubles questions that that they provided and the clearing orders.

## 82

00:27:49.500 --> 00:27:52.320
Brandie Waid: For mathematics about developing border consciousness.

## 83

00:27:54.030 --> 00:28:09.000
Brandie Waid: And those questions were what knowledge, aside from the mathematics and worldview is assumed by this word problem, whether it comes assumptions evaluate those problems and select your own experiences food experiences doesn't require or exclude.

## 84

00:28:10.470 --> 00:28:23.340
Brandie Waid: How can we clear it to reflect the wider number of windows and mirrors and what categories of resistance, might we face, so we started discussing some of this we looked at being engaged in work materials.

85
00:28:24.630 --> 00:28:33.540
Brandie Waid: But one of our homework assignments was to see if we encountered any pot word problems over the last two weeks to see.

## 86

00:28:35.970 --> 00:28:44.700
Brandie Waid: To discuss like how they might have benefited from Dr day and assessment of quitting borders so did anyone come across anything that they were like oh.

87
00:28:47.700 --> 00:28:48.750
Brandie Waid: They like share.

88
00:28:58.620 --> 00:29:01.200
Steph (She/her; treaty 6): I came across one where it was like.
89
00:29:04.170 --> 00:29:13.380
Steph (She/her; treaty 6): 12 students in the class our boys and there are 26 students in the class how many students are girls, and it was on.

90
00:29:14.190 --> 00:29:27.210
Steph (She/her; treaty 6): Some it was on coach which is like this online games like preset questions and afterwards I was like so totally besides the point but not really besides the point and I was like I have a problem with this question.

91
00:29:27.780 --> 00:29:35.430
Steph (She/her; treaty 6): And, like the kids already knew right they already know that there's something questionable about that sort of wording and as like you know.

## 92

00:29:36.930 --> 00:29:45.330
Steph (She/her; treaty 6): met like Mathematically speaking this question doesn't give you enough information so that's when I came across me.

93
00:29:47.730 --> 00:29:49.170
Brandie Waid: yeah, thank you for sharing.

## 94

00:29:50.010 --> 00:29:54.390
Brandie Waid: comes up so so often so glad you were able to play it out we'll talk about it with.
95
00:29:56.700 --> 00:29:57.240
Brandie Waid: anyone else.
96
00:30:03.270 --> 00:30:05.310
Trena Wilkerson (she/her): So this week.
97
00:30:07.500 --> 00:30:12.690

Trena Wilkerson (she/her): I often use the New York Times graphs what's what's it called.
98
00:30:13.830 --> 00:30:15.450
Trena Wilkerson (she/her): What about this graph or something, whatever that.
99
00:30:15.480 --> 00:30:16.740
Trena Wilkerson (she/her): I forgot the exact title.

100
00:30:18.180 --> 00:30:18.540
Trena Wilkerson (she/her): But.
101
00:30:19.320 --> 00:30:22.740
Trena Wilkerson (she/her): The one we were looking at was one that was.
102
00:30:23.850 --> 00:30:33.840
Trena Wilkerson (she/her): taken during the early part of the pen game during the pandemic, the major part of it, and it was like what jobs are most you know needed right now kind of thing.

103
00:30:33.990 --> 00:30:42.330
Trena Wilkerson (she/her): And it was it was a survey that was done, but what it made me think about is they delineated the findings.

104
00:30:43.860 --> 00:30:47.310
Trena Wilkerson (she/her): By male and female, and it made me think about you know.
105
00:30:48.510 --> 00:30:51.750
Trena Wilkerson (she/her): What about people who self identify a different way.
106
00:30:52.860 --> 00:31:02.430
Trena Wilkerson (she/her): And so I thought that was interesting so made me think about the broader scope of statistics and the kinds of questions that we ask, and you know, anyway, so it made me think about that.

107
00:31:04.140 --> 00:31:11.700

Brandie Waid: yeah, thank you for sharing this great example and thinking about like, how do we, how do we talk about.

108
00:31:12.210 --> 00:31:22.980
Brandie Waid: Like the students are going to still keep thing is problems obviously this is a New York Times, and this, you know, and these are graphs that could make this problem and sometimes you use.

109
00:31:24.780 --> 00:31:31.440
Brandie Waid: So, like, how do we talk about this with students, when it does come up.
110
00:31:34.110 --> 00:31:35.130
Brandie Waid: With a question for.
111
00:31:36.960 --> 00:31:38.460
Brandie Waid: me, I think you were gonna say first thing.
112
00:31:38.760 --> 00:31:41.160
Brandie Waid: You can either answer them or share your example or.

113
00:31:41.340 --> 00:31:42.270
Dewey Gottlieb (he/his): yeah I was just gonna.
114
00:31:42.690 --> 00:31:43.560
Brandie Waid: say anything at all.

## 115

00:31:45.900 --> 00:31:47.730
Dewey Gottlieb (he/his): yeah I was gonna share an example.

116
00:31:47.910 --> 00:31:49.950
Dewey Gottlieb (he/his): Do you mind if I just share my screen really quick.
117
00:31:51.270 --> 00:31:56.970

Dewey Gottlieb (he/his): So I can show it to you, so this is a sorry it'll make more sense if you see it so.

118
00:31:58.770 --> 00:32:05.670
Dewey Gottlieb (he/his): When I was in my previous mission statement specialist know we created these materials, when we were transitioning to know common core.

119
00:32:06.930 --> 00:32:09.030
Dewey Gottlieb (he/his): We made a decision as a state to not.
120
00:32:09.390 --> 00:32:14.700
Dewey Gottlieb (he/his): Ask schools to buy new textbooks until the good stuff came out we you know we didn't want to tell school spend.

121
00:32:14.790 --> 00:32:20.250
Dewey Gottlieb (he/his): 10s of thousands of dollars on you know old textbooks that were rebranded so.

122
00:32:20.580 --> 00:32:21.270
Dewey Gottlieb (he/his): I made the.
123
00:32:21.600 --> 00:32:25.530
Dewey Gottlieb (he/his): awful decision to say hey let's get a team of teachers together and write our own curriculum.

124
00:32:26.760 --> 00:32:33.390
Dewey Gottlieb (he/his): which was just a beast of a task over several years anyway so here's a task, this is, this is a task from.

## 125

00:32:33.720 --> 00:32:34.920
Dewey Gottlieb (he/his): An algebra one module.
126
00:32:35.280 --> 00:32:36.480
Dewey Gottlieb (he/his): On functions right.

127
00:32:37.800 --> 00:32:41.700
Dewey Gottlieb (he/his): So I was just you know, I was when that when you gave us this homework assignment.

128
00:32:41.700 --> 00:32:43.230
Dewey Gottlieb (he/his): I just kind of went through these things that.
129
00:32:43.530 --> 00:32:50.130
Dewey Gottlieb (he/his): We wrote a couple of years ago, and I was like I wonder if there's anything there I could have learned, you know learned and learned from.

130
00:32:50.610 --> 00:33:00.630
Dewey Gottlieb (he/his): What we discussed last week and applied to this and this one came up, and I mean I don't know nothing earth shattering but I did notice that there's clearly a binary approach you know binary thinking here.

131
00:33:01.710 --> 00:33:02.070
Dewey Gottlieb (he/his): and

132
00:33:03.720 --> 00:33:12.720
Dewey Gottlieb (he/his): Yes, i'm so I was going to share this is the example that I found out i'm wondering how could this change, you know use some of those ideas to apply to.

133
00:33:13.080 --> 00:33:13.830
Dewey Gottlieb (he/his): Making this.

134
00:33:15.990 --> 00:33:22.500
Dewey Gottlieb (he/his): more inclusive more representative of actual the makeup of people, but I mean it's definitely.

135
00:33:22.530 --> 00:33:29.670
Dewey Gottlieb (he/his): Even though I really like this, you know this, this idea of I got this little task here it's still.

00:33:31.140 --> 00:33:35.310
Dewey Gottlieb (he/his): That represents buying everything, so I kind of tried to be a little bit critical about this one.

137
00:33:35.340 --> 00:33:35.880
Dewey Gottlieb (he/his): So anyway.
138
00:33:37.140 --> 00:33:40.770
Dewey Gottlieb (he/his): I just want to share with you the picture because it'll make more sense it's hard to explain.

139
00:33:41.370 --> 00:33:43.560
Brandie Waid: yeah no that's really.
140
00:33:45.060 --> 00:33:47.340
Brandie Waid: helpful and then cool to look at.
141
00:33:48.390 --> 00:33:51.120
Brandie Waid: It also makes me think this is connecting to.

142
00:33:53.130 --> 00:34:00.300
Brandie Waid: The ranch reading that we were doing preparation of tonight, where they were talking about.

143
00:34:01.530 --> 00:34:03.360
Brandie Waid: Even what counts as a family.

144
00:34:04.440 --> 00:34:10.320
Brandie Waid: And, like the queer not as like whenever you say you know their family you actually just mean they're queer.

145
00:34:11.610 --> 00:34:15.450
Brandie Waid: or like we have this like running joke in our.

00:34:17.040 --> 00:34:19.230
Brandie Waid: My wife and I tend to women coming out group.

147
00:34:20.730 --> 00:34:25.140
Brandie Waid: In the area in New Jersey for tool but supposedly it's in the area.

148
00:34:26.490 --> 00:34:27.420
Brandie Waid: We never been there.

149
00:34:28.650 --> 00:34:29.070
Brandie Waid: So.

150
00:34:30.270 --> 00:34:41.820
Brandie Waid: One of the things that we often talk about is like you know the family discount which is like if you're like visibly clear and the other person knows that they might give you the family to out.

## 151

00:34:45.030 --> 00:34:45.390
Brandie Waid: yeah.

152
00:34:45.990 --> 00:34:46.980
Brandie Waid: So that.

153
00:34:47.190 --> 00:34:50.040
Brandie Waid: I can you know, even though this we referenced the article I mean.
154
00:34:50.430 --> 00:34:59.640
Dewey Gottlieb (he/his): I know i'm sure we'll talk about a little bit later, but even thinking of that So if I was a classroom teacher if I was part of the team that created all these resorts and writing this page.

155
00:34:59.910 --> 00:35:01.320
Dewey Gottlieb (he/his): I honestly don't know.

00:35:01.440 --> 00:35:02.400
Dewey Gottlieb (he/his): If I would have had.

## 157

00:35:03.510 --> 00:35:21.480
Dewey Gottlieb (he/his): The guts to make one of the couples gay and then you know even thinking about it i'm kind of like it's kind of like, why not, but then I think I would be i'd be a little I don't know if I would have the you know if i'd be brave enough to do that, even though I want to.

158
00:35:22.200 --> 00:35:27.570
Dewey Gottlieb (he/his): yeah yeah and it kind of relates to what the article was talking about, but i'll see.

159
00:35:28.710 --> 00:35:31.560
Brandie Waid: ya know, can you keep sharing your screen, because I.
160
00:35:31.560 --> 00:35:32.250
Brandie Waid: Think it's a good.

161
00:35:32.790 --> 00:35:47.070
Brandie Waid: exercise for us to think about so I dropped the slide in the chat and trina thanks for letting me know I didn't share it correctly, but it should be good now so if you want to go to fight for and look at the questions.

162
00:35:48.780 --> 00:36:03.720
Brandie Waid: So the kind of worldview that we're talking about which is question number one that this problem is assuming is the binary which do he says, and also this idea of what and who counts as a family also.

163
00:36:04.740 --> 00:36:09.690
Brandie Waid: So those are the kind of world views we see any other worldviews or assumptions that this might.

164
00:36:10.770 --> 00:36:11.940
Brandie Waid: be assuming.

00:36:13.290 --> 00:36:14.100
Brandie Waid: we're including.

166
00:36:37.560 --> 00:36:39.510
Brandie Waid: Sorry, what is being here i'm.

167
00:36:41.160 --> 00:36:41.880
So sorry.
168
00:36:43.410 --> 00:36:52.590
Jessica Lee: there's no there's no like single parents represented in I mean if you were to represent all families that you would have a really big diagram right.

169
00:36:53.400 --> 00:36:53.820
well.

170
00:36:56.070 --> 00:37:03.900
Brandie Waid: know and that's true, I mean, I know I have so many friends my age that are starting to freeze their eggs and decide like they want to be, single mothers.

171
00:37:05.310 --> 00:37:07.890
Brandie Waid: So that's a real a real thing that we're.
172
00:37:09.150 --> 00:37:12.510
Brandie Waid: Seeing we've seen before, and we're seeing now that's it's great.

## 173

00:37:14.610 --> 00:37:19.830
Jessica Lee: Every everyone is either a square or circle or rectangle I guess what.

174
00:37:22.290 --> 00:37:24.390
Brandie Waid: Does that mean yeah.

175
00:37:25.140 --> 00:37:28.920
Jessica Lee: The word all women are represented as ovals while men are rectangles.

176
00:37:32.970 --> 00:37:35.310
Jessica Lee: Not not to like blast tools into your assignment.
177
00:37:35.640 --> 00:37:37.650
Dewey Gottlieb (he/his): Please do I that's the reason why I shared it.
178
00:37:40.140 --> 00:37:41.100
Dewey Gottlieb (he/his): I truly welcome it.
179
00:37:41.160 --> 00:37:48.090
Dewey Gottlieb (he/his): really is, I will tell you a few years ago, I remember when we came up with this and we're like Oh, this is so, this is a clever way to talk about functions.

180
00:37:49.980 --> 00:37:56.610
Dewey Gottlieb (he/his): Five years later, five years later at this like yeah there's some there's some potential damage done here.

181
00:37:58.500 --> 00:38:00.510
Jessica Lee: I did last week okay so.

## 182

00:38:04.500 --> 00:38:06.750
Dewey Gottlieb (he/his): Last holes in it i'd be that helped me learn.

183
00:38:07.890 --> 00:38:08.160
Dewey Gottlieb (he/his): Really.
184
00:38:08.220 --> 00:38:09.330
Brandie Waid: It happens to all of us.
185
00:38:10.860 --> 00:38:14.280
Brandie Waid: So JESSICA, you pointed out some important thing.

00:38:15.630 --> 00:38:33.240
Brandie Waid: And I think some of this is coming from also kind of related question, two and three so about the problem doesn't reflect our own experiences and then whose experiences are reflected or not, so we don't have nine non binary people.

187
00:38:35.130 --> 00:38:49.950
Brandie Waid: We also like don't have to our knowledge, trans people, because we know that there are individuals that transition after being married or having children that's not reflected here.

188
00:38:51.360 --> 00:38:54.000
Brandie Waid: single parents, they fail.

## 189

00:39:19.050 --> 00:39:19.860
Trena Wilkerson (she/her): He said this.

190
00:39:21.510 --> 00:39:38.340
Trena Wilkerson (she/her): boat, what about you know when you it's not your mom or you know mom or dad or it's your aunt your uncle your you know grandparents, whatever it might be there's a lot of different structures for families that.

191
00:39:41.580 --> 00:39:42.810
Trena Wilkerson (she/her): In that way, as well.
192
00:39:43.980 --> 00:39:54.450
Brandie Waid: yeah so what we're asking for its biological family here, eventually, which is a good point three now and also like adopted family like what are what are they asking for.

193
00:39:55.980 --> 00:39:56.940
Brandie Waid: The way.
194
00:39:59.130 --> 00:40:02.220
Dewey Gottlieb (he/his): yeah and even now, even just thinking about there's a.
195
00:40:03.240 --> 00:40:16.680

Dewey Gottlieb (he/his): missed opportunity like let's say they james's James was a woman's James was a woman, for example, they're having that would be then, if you try to do the mother of Richard.

196
00:40:17.910 --> 00:40:19.320
Dewey Gottlieb (he/his): Now there's two outputs.
197
00:40:19.710 --> 00:40:32.370
Dewey Gottlieb (he/his): over which provides an opportunity to talk about this as a function of that you know go back to that whole idea so there's even a missed opportunity by not being inclusive of different types of married couples.

198
00:40:33.930 --> 00:40:34.290
Dewey Gottlieb (he/his): anyway.
199
00:40:34.860 --> 00:40:35.940
Dewey Gottlieb (he/his): That just kind of popped in my head.

200
00:40:36.750 --> 00:40:37.110
yeah.
201
00:40:38.370 --> 00:40:40.950
Brandie Waid: that's a great a great noticing.
202
00:40:43.260 --> 00:40:52.890
Steph (She/her; treaty 6): This may be like off topic or wrong i'm just looking at the names and noticing that most of the names are Anglo Saxon.

203
00:40:54.930 --> 00:40:55.590
Steph (She/her; treaty 6): i'm.
204
00:40:57.570 --> 00:41:01.200
Steph (She/her; treaty 6): Not to make assumptions about someone's ethnicity, based on the name but.

00:41:02.340 --> 00:41:03.480
Brandie Waid: yeah yeah.
206
00:41:05.610 --> 00:41:09.420
Brandie Waid: Very good, I mean very good observation.
207
00:41:09.840 --> 00:41:10.200
Dewey Gottlieb (he/his): Is.
208
00:41:10.860 --> 00:41:13.830
Jessica Lee: It would be interesting to see what step parents.
209
00:41:13.920 --> 00:41:16.650
Brandie Waid: or step family members, like yeah.
210
00:41:18.240 --> 00:41:19.020
Brandie Waid: and sensibly.
211
00:41:20.220 --> 00:41:20.940
Trena Wilkerson (she/her): and doing.
212
00:41:22.230 --> 00:41:32.640
Trena Wilkerson (she/her): you're in Hawaii right and it's supposed to Hawaii so How does that another thing is just reflecting the indigenous you know the indigenous population, you know.

213
00:41:34.080 --> 00:41:35.940
Trena Wilkerson (she/her): Another interesting part of it.

214
00:41:36.180 --> 00:41:40.230
Dewey Gottlieb (he/his): yeah yeah you're absolutely right now there's only one hawaiian name in there.

215
00:41:41.250 --> 00:41:41.730

Dewey Gottlieb (he/his): yeah.
216
00:41:42.330 --> 00:41:51.360
Brandie Waid: So that leads us to the next one, how do we create a problem to reflect the wider number of scenarios, so we can include more indigenous name it sounds like that might be.

217
00:41:53.910 --> 00:41:57.360
Brandie Waid: One suggestions and non Anglo.
218
00:41:59.100 --> 00:42:00.360
Brandie Waid: centric name.
219
00:42:02.190 --> 00:42:03.330
Brandie Waid: What else could we do.

220
00:42:13.590 --> 00:42:14.400
Brandie Waid: status, I said.
221
00:42:15.450 --> 00:42:15.870
Dewey Gottlieb (he/his): i'm sorry.

## 222

00:42:16.770 --> 00:42:18.090
Brandie Waid: Was this on a State assessment.

223
00:42:18.510 --> 00:42:19.650
Dewey Gottlieb (he/his): know this was the.
224
00:42:20.850 --> 00:42:21.270
Dewey Gottlieb (he/his): The.
225
00:42:22.620 --> 00:42:23.670
Dewey Gottlieb (he/his): algebra one curriculum.

00:42:24.990 --> 00:42:25.860
Brandie Waid: So this is something like.

## 227

00:42:26.100 --> 00:42:26.970
Dewey Gottlieb (he/his): This is like a textbook.
228
00:42:27.180 --> 00:42:30.270
Brandie Waid: Essential OK, so the teacher would get.
229
00:42:34.110 --> 00:42:34.410
Brandie Waid: To.

230
00:42:36.180 --> 00:42:36.540
Brandie Waid: talk.

231
00:42:37.200 --> 00:42:38.490
Brandie Waid: yeah yeah yeah.
232
00:42:38.550 --> 00:42:41.430
Dewey Gottlieb (he/his): This would be something that we're doing small groups type of thing.
233
00:42:41.760 --> 00:42:55.800
Brandie Waid: yeah so i'm wondering if maybe a way to clear it that can reflect you know, a whole broad range of families and life experiences, is to have didn't fill in their own country.

234
00:42:56.880 --> 00:42:57.840
Brandie Waid: whatever that means.
235
00:42:58.320 --> 00:43:02.610
Brandie Waid: Right, whoever they concern if they asked the biological is that.

236
00:43:03.900 --> 00:43:06.870
Brandie Waid: Whatever whoever you consider your family, you can put it your family tree.

00:43:09.300 --> 00:43:20.520
Brandie Waid: That might be interesting and then comparing the different family trees to see, then you could get that idea of like if we describe a function in this way in this function if we you know if we define it in this, why is it not.

238
00:43:22.620 --> 00:43:24.000
Brandie Waid: Well, what do y'all think about that.

239
00:43:27.900 --> 00:43:30.450
Dewey Gottlieb (he/his): I like that idea, and even then coming up with the.
240
00:43:31.500 --> 00:43:33.750
Dewey Gottlieb (he/his): function statements here.
241
00:43:34.800 --> 00:43:35.670
Dewey Gottlieb (he/his): Their family tree.

242
00:43:39.450 --> 00:43:40.170
Brandie Waid: When it opens up.
243
00:43:41.130 --> 00:43:41.670
A lot.

244
00:43:46.140 --> 00:43:48.630
Dewey Gottlieb (he/his): In a good way you know mathematically.
245
00:43:50.280 --> 00:43:51.450
Trena Wilkerson (she/her): more relevant to them.
246
00:43:51.540 --> 00:43:52.230
Yes.

247
00:43:56.070 --> 00:43:56.310

Okay.
248
00:43:57.330 --> 00:43:58.350
Brandie Waid: anyone else have any thoughts.
249
00:44:12.570 --> 00:44:13.950
Brandie Waid: Do you had mentioned that.
250
00:44:15.000 --> 00:44:23.880
Brandie Waid: Like you don't know that you would have the guts to change it to or whatever, however, you phrase it to change it to to.

251
00:44:25.200 --> 00:44:27.030
Brandie Waid: thing ginger engine or couple.
252
00:44:28.800 --> 00:44:36.030
Brandie Waid: So that is making me think of creative insubordination and this last question essentially that.

253
00:44:37.110 --> 00:44:42.600
Brandie Waid: gay and ruble included which were, what are the categories of resistance that we.
254
00:44:44.130 --> 00:44:50.190
Brandie Waid: might face for the new word problem and how we respond to or get support for those.

255
00:44:51.780 --> 00:44:58.140
Brandie Waid: So with this change if everyone's doing their own family tree.

256
00:44:59.940 --> 00:45:04.260
Brandie Waid: I feel like you would get lester's this like that would it wouldn't be a problem.
257
00:45:05.700 --> 00:45:07.170
Brandie Waid: To do anything.

00:45:09.150 --> 00:45:16.950
Brandie Waid: So that might be one workaround for that, but we also want to show students that we explicitly support.

259
00:45:17.550 --> 00:45:18.900
Brandie Waid: Just clear individuals.

260
00:45:19.170 --> 00:45:23.520
Brandie Waid: So what What could we do like what what.
261
00:45:25.080 --> 00:45:28.230
Brandie Waid: How do we respond it we do change the.
262
00:45:44.850 --> 00:45:46.980
Brandie Waid: Thought I saw you come off mute.

263
00:45:47.640 --> 00:45:51.420
Trena Wilkerson (she/her): Oh i'm just thinking, I was trying to figure out.
264
00:45:54.870 --> 00:46:01.290
Trena Wilkerson (she/her): A way to do it, because this is algebra one right doing yes it's number one, so that it.

265
00:46:03.270 --> 00:46:05.460
Trena Wilkerson (she/her): doesn't move away from.
266
00:46:06.600 --> 00:46:09.180
Trena Wilkerson (she/her): The mathematical goal okay.
267
00:46:10.950 --> 00:46:17.970
Trena Wilkerson (she/her): Because I think about the complexity of what this could be right and not that you want to avoid complexity, because you don't but if this is sort of an.

00:46:18.210 --> 00:46:24.990
Trena Wilkerson (she/her): introductory thing to functions, then you know, I was just trying to figure out I don't have a solution to it, I was just thinking about that.

269
00:46:32.070 --> 00:46:41.550
Brandie Waid: Well, and it could be even just like kind of getting to your point trina like if the idea here is to get an idea of a function.

270
00:46:42.720 --> 00:46:51.330
Brandie Waid: And like what can be a function consider a function and not maybe there's also presenting to families, one that is.

## 271

00:46:52.470 --> 00:46:54.990
Brandie Waid: hetero normative or normative and one that's not.

272
00:46:56.820 --> 00:46:58.890
Brandie Waid: And then, if there's some resistance.
273
00:47:00.810 --> 00:47:09.840
Brandie Waid: Effects of your mathematical goal, you can say literature about you know students seeing themselves within the task.

274
00:47:13.410 --> 00:47:15.900
Brandie Waid: those sorts of things like the idea of.
275
00:47:19.860 --> 00:47:28.860
Brandie Waid: Countering with evidence, a doctor, because he had his talks about that might be a good strategy in that case.

276
00:47:29.970 --> 00:47:33.720
Brandie Waid: Which is typically one that I like to use, but then also.
277
00:47:34.800 --> 00:47:42.660

Brandie Waid: The idea of turning irrational issue until on wall one I think that's also a really powerful tool because it's like if you can make the case.

278
00:47:43.740 --> 00:47:51.840
Brandie Waid: When you're talking to someone like what do we want to stand for, do we want our students to like see themselves do we want to represent all students.

279
00:47:53.220 --> 00:47:58.320
Brandie Waid: Are we only educating white students that are just gender and straight.
280
00:47:59.460 --> 00:48:08.100
Brandie Waid: No, so you know or or even families so that's another tactic that I think is probably.

281
00:48:09.540 --> 00:48:12.960
Brandie Waid: But this is making me think so thank you Julie, you can stop sharing.
282
00:48:14.520 --> 00:48:22.560
Brandie Waid: This is actually making me think of the example that I found and was going to share, which is.

283
00:48:25.830 --> 00:48:28.350
Brandie Waid: So i'm working with a.
284
00:48:29.730 --> 00:48:33.900
Brandie Waid: pixel company called agile mind I guess they're.

285
00:48:35.460 --> 00:48:38.760
Brandie Waid: Actually, the overarching company, but a crucial individual and.
286
00:48:40.050 --> 00:48:50.130
Brandie Waid: And they have hired me to look at specific units within their grade seven tests and to talk about.

00:48:52.140 --> 00:48:57.900
Brandie Waid: And just to like help them become more clear, inclusive and their texts which I think is like.

288
00:48:59.910 --> 00:49:03.450
Brandie Waid: phenomenal because we don't really see many textbook publishers doing that.
289
00:49:04.740 --> 00:49:12.840
Brandie Waid: So, but there was this question of like what do we do teachers their teachers major problem you know they might.

290
00:49:13.410 --> 00:49:26.010
Brandie Waid: have someone make fun of students that are clear if we are inclusive like what is, what is the protocol, you know surrounding this like, how do we actually do this in a meaningful way.

291
00:49:27.600 --> 00:49:40.230
Brandie Waid: So that is making me think of like something that I had talked about with them is that not only should we be including career problems but there needs to be something in that textbook maybe it's like.

292
00:49:42.480 --> 00:49:48.660
Brandie Waid: Not necessarily in the textbook but, like in the teachers edition that says like this is what the textbook has in it.

293
00:49:49.080 --> 00:50:05.400
Brandie Waid: And here's how to talk about it in an inclusive way and I think that's important for all like you know social justice issues and all identities, like we want to do a file so including that would be helpful, I think people.

294
00:50:06.870 --> 00:50:21.840
Brandie Waid: So that's what doing that that's making me think of because, like if we if teachers had something like that to move to I feel like that would be really powerful and make them feel safer to do that because they had like something to fall back on.

295
00:50:23.430 --> 00:50:25.410

Brandie Waid: But this is the example that I found.
296
00:50:26.640 --> 00:50:31.650
Brandie Waid: And I just wanted to see what y'all thought about it it's actually multiple.
297
00:50:32.880 --> 00:50:33.300
Brandie Waid: Things.
298
00:50:34.530 --> 00:50:41.340
Brandie Waid: But this scenario is for adding and subtracting integers and it follows his character.

299
00:50:42.510 --> 00:50:47.460
Brandie Waid: Archibald the amp who loves adventures and.
300
00:50:48.480 --> 00:51:00.690
Brandie Waid: He owns his what he's trying to earn $\$ 200$ to put in his next adventure I don't really know I hit done so it's the way oh he's saving feel certain money.

301
00:51:03.930 --> 00:51:08.610
Brandie Waid: Then from there, talks about how he owes his uncle Ramon.

302
00:51:09.810 --> 00:51:14.670
Brandie Waid: To money so as you think about it on the number line.
303
00:51:17.820 --> 00:51:23.790
Brandie Waid: know as you think about negative numbers, using the number line and so forth.
304
00:51:25.590 --> 00:51:29.070
Brandie Waid: Then it introduces his friends.

305
00:51:30.600 --> 00:51:31.560
Brandie Waid: Eventually.

306
00:51:33.270 --> 00:51:34.800
Brandie Waid: That might be a little boring.

307
00:51:42.930 --> 00:51:43.950
Brandie Waid: talks about how.

308
00:51:45.150 --> 00:51:49.890
Brandie Waid: Where our child wants to go, we might run into girlfriend if you go to Spain.
309
00:51:52.440 --> 00:51:53.190
Brandie Waid: With the one that.

310
00:51:54.480 --> 00:51:55.920
Brandie Waid: introduces his friends.

311
00:52:09.990 --> 00:52:12.600
Brandie Waid: Okay, then the introduces the print Annabel.
312
00:52:14.040 --> 00:52:17.610
Brandie Waid: Who has people are saved and a salary necklace.
313
00:52:19.140 --> 00:52:21.240
Brandie Waid: To model, some of the subtraction.
314
00:52:22.440 --> 00:52:23.850
Brandie Waid: That goes through so.
315
00:52:25.740 --> 00:52:25.830
I.

316
00:52:26.940 --> 00:52:37.500
Brandie Waid: chose to say limitation and so forth, then we joked to them wanting to take an adventure in a hot air balloon the one with the hat is our couple.

317
00:52:39.990 --> 00:52:40.950
Brandie Waid: Of shows them.

318
00:52:42.420 --> 00:52:45.480
Brandie Waid: Moving up and down and whatnot so.
319
00:52:48.630 --> 00:52:49.290
Brandie Waid: Now that was what.

320
00:52:50.400 --> 00:52:53.160
Brandie Waid: Are there any things that are coming to mind based on.
321
00:52:54.630 --> 00:52:59.670
Brandie Waid: What assumptions are being made was reflective not before.
322
00:53:21.600 --> 00:53:27.150
Trena Wilkerson (she/her): So brandi are you are you asking about like the pink and blue assumptions and.

323
00:53:28.200 --> 00:53:28.470
Brandie Waid: that's.
324
00:53:28.680 --> 00:53:29.820
Trena Wilkerson (she/her): Another and.
325
00:53:31.320 --> 00:53:35.070
Trena Wilkerson (she/her): And the ex ex girlfriend and.
326
00:53:36.240 --> 00:53:37.860
Trena Wilkerson (she/her): Things like that's a couple of things.
327
00:53:38.190 --> 00:53:45.420

Brandie Waid: yeah Those are three then popped out yeah exactly anything else POPs out put up three all.

328
00:53:46.320 --> 00:53:48.510
Steph (She/her; treaty 6): eyes were different to.

329
00:53:49.110 --> 00:53:49.650
Oh.
330
00:53:51.030 --> 00:53:51.360
Trena Wilkerson (she/her): Oh.
331
00:53:51.420 --> 00:53:53.910
Trena Wilkerson (she/her): Why didn't notice yeah.
332
00:53:54.570 --> 00:53:54.840
Trena Wilkerson (she/her): Let me.
333
00:53:56.580 --> 00:54:08.040
Steph (She/her; treaty 6): yeah I only noticed, because it looks like I think i'm pretty sure the eyes were different have like mascara or something going on, oh no no i'm wrong sorry.

334
00:54:08.190 --> 00:54:09.030
Brandie Waid: I think about it.
335
00:54:09.390 --> 00:54:11.760
Trena Wilkerson (she/her): that's, the main thing is right that's all it is.
336
00:54:12.090 --> 00:54:15.780
Brandie Waid: Yes, hello, and then Archibald if we go back to our trouble.

337
00:54:17.040 --> 00:54:18.210
Brandie Waid: yeah The other thing but.

00:54:18.750 --> 00:54:26.580
Trena Wilkerson (she/her): He did well hi antennas though we're fluffier did you notice that not I don't know if that matters and good did you do, did you notice that.

339
00:54:27.690 --> 00:54:29.370
Steph (She/her; treaty 6): Beauty farms for female and.
340
00:54:29.370 --> 00:54:29.880
Trena Wilkerson (she/her): There you go.

341
00:54:32.880 --> 00:54:33.660
Brandie Waid: yeah.

342
00:54:34.680 --> 00:54:38.250
Trena Wilkerson (she/her): I sort of like fluffy I don't know your eyes are better than mine stuff so.

343
00:54:39.300 --> 00:54:47.400
Trena Wilkerson (she/her): I didn't even notice that that's, but that is also it's a but I mean their ads it's not a person so.

344
00:54:48.780 --> 00:54:54.690
Brandie Waid: But still, you know, reinforcing somebody in order that we have.
345
00:54:54.750 --> 00:54:56.850
Trena Wilkerson (she/her): And people have different kinds of Oz and stuff so.
346
00:54:58.470 --> 00:55:01.800
Brandie Waid: And also like unnecessarily so.
347
00:55:03.030 --> 00:55:03.180
Brandie Waid: there.

00:55:11.580 --> 00:55:15.600
Steph (She/her; treaty 6): Were the balloon one when they're getting on to the balloon.

349
00:55:17.760 --> 00:55:23.220
Steph (She/her; treaty 6): Is it, so we might clear this by having.

350
00:55:25.080 --> 00:55:28.890
Steph (She/her; treaty 6): Annabel push the balloon off of the cliff.
351
00:55:29.430 --> 00:55:30.000
yeah.

352
00:55:32.520 --> 00:55:35.910
Brandie Waid: Good noticing I didn't even notice that he was wanna push it.

353
00:55:38.430 --> 00:55:40.080
Brandie Waid: sensibly querying some general.
354
00:55:44.430 --> 00:55:45.600
Brandie Waid: What about.

355
00:55:47.880 --> 00:55:48.570
Brandie Waid: Anything else.
356
00:55:52.080 --> 00:55:53.880
Brandie Waid: pulling this up just killing.
357
00:55:55.800 --> 00:56:01.290
Brandie Waid: weekly income position function project, where they look for their own position.

358
00:56:02.640 --> 00:56:03.480
Brandie Waid: Oh cool.

00:56:14.370 --> 00:56:14.850
Brandie Waid: That.

360
00:56:16.620 --> 00:56:17.310
Brandie Waid: that's great.

361
00:56:20.700 --> 00:56:24.000
Jessica Lee: there's a whole thread I think if you go down there's other versions of.
362
00:56:25.440 --> 00:56:26.130
Brandie Waid: Oh, my goodness.

363
00:56:29.430 --> 00:56:44.820
Dewey Gottlieb (he/his): Oh there's a teacher she presented last year snow in nc nc TIM did the 100 days professional learning after Chicago was cancelled was that last year or two years ago, I was two years anyway, I don't know where we are, but.

364
00:56:44.850 --> 00:56:53.190
Dewey Gottlieb (he/his): We are supposed to be in Chicago that got cancelled Evan so nct amp did the 100 days and there was a teacher, I don't remember where she's from but I.

365
00:56:53.790 --> 00:57:10.890
Dewey Gottlieb (he/his): participate in her session, and she did it, that was a huge part of her presentation, with all these different ways to do compositions that use real scenarios and you know images to see what would it look like, if you can post things in different ways, so that's I love that.

366
00:57:11.400 --> 00:57:13.230
Dewey Gottlieb (he/his): yeah bread one it's awesome.

367
00:57:13.740 --> 00:57:23.400
Brandie Waid: yeah, and this is like I mean this is, I have to do with career identity, but it definitely has to do with clear like you know clear ideas.

Brandie Waid: So I love this.
369
00:57:28.410 --> 00:57:29.160
Brandie Waid: example this.
370
00:57:33.870 --> 00:57:49.530
Brandie Waid: Is awesome The other thing I noticed and on this problem I don't know if anyone else, like I also looked at way more units than this one so something that stood out to me, which I haven't decided yet if i'm.

371
00:57:50.970 --> 00:57:52.860
Brandie Waid: How I feel about it but.

372
00:57:54.030 --> 00:57:58.380
Brandie Waid: So we have Archibald the ants and then he.

373
00:57:59.550 --> 00:58:13.740
Brandie Waid: owes his uncle Ramon money and it just made me think because the module before that, like follows a specific scenario was actually based on a.

374
00:58:16.740 --> 00:58:22.410
Brandie Waid: girl that plays basketball I spoke to this place basketball and her name was haley and she's like oh.

375
00:58:23.460 --> 00:58:27.540
Brandie Waid: But then we have this you know my female name who's an answer.
376
00:58:28.830 --> 00:58:44.940
Brandie Waid: I don't know it just felt like that's where our is our diversity comes in, is an eight um So what are your thoughts I have no idea if, like i'm just looking at specific unit, but for Elsa.

## 377

00:58:46.650 --> 00:58:51.150
Trena Wilkerson (she/her): Does made me think about though the collective the full the full thing.

00:58:52.380 --> 00:58:55.080
Trena Wilkerson (she/her): ya know and just just a wondering.
379
00:58:58.830 --> 00:59:00.750
Trena Wilkerson (she/her): How how many different.
380
00:59:00.930 --> 00:59:11.970
Trena Wilkerson (she/her): types of situations there are so like that's that's The other thing that's sort of I think challenging about something like this, when you're looking at a full curriculum like this.

381
00:59:12.090 --> 00:59:14.100
Trena Wilkerson (she/her): yeah is you know.
382
00:59:15.870 --> 00:59:24.180
Trena Wilkerson (she/her): I don't know if anybody has time to go through every single one of them, but then, but you know you know I mean it's like what's the collective like so maybe this is the only time.

383
00:59:25.110 --> 00:59:36.390
Trena Wilkerson (she/her): The situation occurs I don't know so I was just just a wondering is like, how do you I guess when you're like even evaluating a textbook like doing what you were you know you were thinking about that and for you're looking at curriculum.

384
00:59:37.470 --> 00:59:46.800
Trena Wilkerson (she/her): What are all the different kinds of things you should take into consideration when you're looking at it as a whole, of all the different things in it so.

385
00:59:51.450 --> 00:59:51.990
Brandie Waid: agreed.
386
00:59:53.670 --> 00:59:56.940
Brandie Waid: And it's hard it's hard to do that for sure.

00:59:59.700 --> 01:00:03.330
Brandie Waid: Try to hire people to do it get that on test.

388
01:00:06.300 --> 01:00:10.950
Brandie Waid: I will be done an example I just thought it would be interesting.

389
01:00:10.980 --> 01:00:11.760
Dewey Gottlieb (he/his): To consider.
390
01:00:12.720 --> 01:00:15.120
Brandie Waid: As we look through.

391
01:00:15.510 --> 01:00:21.150
Brandie Waid: That won't go ahead and move on thank all the sharing of the problems that you notice.

392
01:00:22.440 --> 01:00:28.590
Brandie Waid: I think those were excellent examples of how these questions might come into.
393
01:00:29.160 --> 01:00:41.130
Brandie Waid: play and then how it can talk about them with students, whether it be through changing the problem so it's more you know focus on them or explicitly pointing out like I see something that's problematic here let's talk about it.

394
01:00:42.960 --> 01:00:46.260
Brandie Waid: So, and we already talked about some of these in the context of.

395
01:00:47.370 --> 01:01:04.110
Brandie Waid: The problem that do we share and thank you for sharing that um but are there any of these as you were reading duffers with yet his strategies that you had a question about or that really resonated with you or.

396
01:01:06.960 --> 01:01:11.190
Brandie Waid: That you thought about when you were reading the second those the rams reading for this week.

397
01:01:16.350 --> 01:01:17.250
Brandie Waid: We can come up.

398
01:01:27.960 --> 01:01:32.910
Trena Wilkerson (she/her): i'm wondering if y'all could talk a little bit more, I thought, maybe I might have other examples, so.

399
01:01:34.260 --> 01:01:36.990
Trena Wilkerson (she/her): To help me to unpack the use the masters.
400
01:01:36.990 --> 01:01:37.620
tools.

401
01:01:39.390 --> 01:01:39.810
Brandie Waid: yeah.

402
01:01:40.740 --> 01:01:41.790
Brandie Waid: there's only one happening.
403
01:01:42.240 --> 01:01:45.450
Trena Wilkerson (she/her): Just other examples, if any of you have other example so.
404
01:01:46.560 --> 01:01:46.890
Brandie Waid: yeah.
405
01:01:49.980 --> 01:01:53.280
Brandie Waid: Anyone have anything they want to talk about in relation to that.
406
01:01:54.930 --> 01:01:57.150
Brandie Waid: What it looks like to use the Masters tools.

407
01:02:12.600 --> 01:02:13.800

Trena Wilkerson (she/her): too hard to think tonight.
408
01:02:15.810 --> 01:02:16.500
Brandie Waid: so late.
409
01:02:17.040 --> 01:02:18.090
Trena Wilkerson (she/her): I know I know.
410
01:02:18.990 --> 01:02:19.260
Dewey Gottlieb (he/his): I have.
411
01:02:20.310 --> 01:02:21.870
Dewey Gottlieb (he/his): had to go back to review the article so.
412
01:02:25.500 --> 01:02:27.750
Dewey Gottlieb (he/his): yeah the Masters tools.

413
01:02:28.350 --> 01:02:30.210
Brandie Waid: From a little bit of a refresher.
414
01:02:30.690 --> 01:02:33.390
Brandie Waid: Using a master tools that actually comes from.
415
01:02:34.650 --> 01:02:35.550
Brandie Waid: French reward.

416
01:02:36.870 --> 01:02:44.130
Brandie Waid: poem that talks about using the Masters tools and essentially says, you will never the Court lessons, you will never.

417
01:02:46.140 --> 01:02:49.530
Brandie Waid: You can we can ever dismantled masters house with the master school.

01:02:51.030 --> 01:03:01.890
Brandie Waid: So we need to use other means, but in the article doctor who theaters is saying yes that's true, it will, it will not lead to a complete dismantling of the system.

419
01:03:02.190 --> 01:03:20.220
Brandie Waid: But in the short term, we can use the Masters tools, the things that the you know the school that the system requires of us to justify what we're doing so, whether that be, I think one of the samples that Dr Gutierrez gives his is.

420
01:03:21.330 --> 01:03:33.510
Brandie Waid: Like finding relevant common core standards in relation to what you're doing because that's a way to use the master source to say I am teaching when i'm supposed to be teaching be.

421
01:03:34.860 --> 01:03:37.320
Brandie Waid: That sort of thing that anyone else have any other.

422
01:03:38.460 --> 01:03:40.050
Brandie Waid: than any other thoughts come to mind.

423
01:03:41.460 --> 01:03:42.990
Brandie Waid: Either when you were reading or whatever I just.

424
01:03:44.220 --> 01:03:45.000
Brandie Waid: Read kept it.
425
01:04:03.120 --> 01:04:08.760
Trena Wilkerson (she/her): Thank you, that that's helpful it's kind of what I that's what I was thinking you know it's sort of like using.

426
01:04:10.470 --> 01:04:12.960
Trena Wilkerson (she/her): In a sense, you're also using things that that.
427
01:04:14.520 --> 01:04:17.010
Trena Wilkerson (she/her): Language or terms or whether they're familiar with.

01:04:18.720 --> 01:04:19.260
Brandie Waid: That.

429
01:04:19.560 --> 01:04:26.040
Trena Wilkerson (she/her): showing a kind of a different perspective, but using using that so that they can connect to it and so.

430
01:04:26.550 --> 01:04:30.600
Brandie Waid: yeah and honestly, be this is actually making me think of.
431
01:04:31.800 --> 01:04:43.230
Brandie Waid: Two things the other thing that I like to you, whenever i'm engaging the strategy strategy of using the Masters tool is especially when you're working with a school like it will have a mission.

432
01:04:44.280 --> 01:04:50.130
Brandie Waid: exciting things in the mission to justify what you're doing in the classroom is very helpful.

433
01:04:51.750 --> 01:04:57.720
Brandie Waid: To get you know i'm just doing what you told me to do, or what you say, we stand for.

434
01:04:59.100 --> 01:05:06.480
Brandie Waid: So that's a really cool way to use the master schools for creative insubordination but also it's making me think of.

435
01:05:07.590 --> 01:05:13.860
Brandie Waid: My business partner, Dr Leah Cohen, who is also a New Jersey, they feature.
436
01:05:15.150 --> 01:05:20.910
Brandie Waid: We started radical pedagogy and fused together and we've been doing a series of professional development, with.

01:05:22.200 --> 01:05:24.630
Brandie Waid: Several cohorts that rutgers house out here.

438
01:05:25.980 --> 01:05:28.050
Brandie Waid: And it's been on.
439
01:05:29.100 --> 01:05:37.350
Brandie Waid: What is critical race theory, what is the pushback of critical issue a look like what can we do you know, like a three part series on that.

440
01:05:38.610 --> 01:05:42.570
Brandie Waid: So one of the things that we have been designing our.
441
01:05:43.320 --> 01:05:52.080
Brandie Waid: TVs around is looking at New Jersey legislation and New Jersey legislation, we have the Amazon Act, which was passed 20 years ago which says that.

442
01:05:52.440 --> 01:06:03.720
Brandie Waid: you're required to teach black history and teach it in a way that doesn't isn't just limited to slavery in depth view so that's one of them, then we have.

443
01:06:05.340 --> 01:06:29.550
Brandie Waid: I think three years ago, Governor mercy signing legislation that said that you have to teach LGBT Q plus and disability history talk about the positive contributions of individuals in those groups, and then a third piece of legislation would find in March 2021 I believe.

444
01:06:30.660 --> 01:06:31.560
Brandie Waid: That was.
445
01:06:32.670 --> 01:06:34.020
Brandie Waid: Stating that.
446
01:06:35.160 --> 01:06:40.830

Brandie Waid: You have to like teachers need to teach about and reflect apartments unconscious bias.

447
01:06:41.460 --> 01:06:47.250
Brandie Waid: So we have a lot of times being like, how do we first of all, we need to know what the laws are.

448
01:06:47.610 --> 01:07:02.040
Brandie Waid: A second, how do we use the walls to our advantage and, in essence, using the Masters talker say wait wait i'm just doing what I was told to do, because this is, you know what the law says i'm not might be another example.

449
01:07:08.370 --> 01:07:10.710
Brandie Waid: All right, we'll go ahead and move on.
450
01:07:11.760 --> 01:07:13.260
Brandie Waid: So that was a great.
451
01:07:14.970 --> 01:07:18.570
Brandie Waid: Discussion okay so that's all for last week.
452
01:07:20.040 --> 01:07:22.050
Brandie Waid: Last week, again, but this week's reading we read.
453
01:07:23.100 --> 01:07:23.940
Brandie Waid: Iran.

454
01:07:25.080 --> 01:07:30.210
Brandie Waid: Who i'd leave identifies as a non binary scholar uses bacon pronouns.
455
01:07:31.560 --> 01:07:45.840
Brandie Waid: wrote about methodical in query kind of coined this term, which was infusing queer theory in to the teaching in this case, they were talking about the teaching of elementary mathematics.

01:07:46.980 --> 01:07:49.140
Brandie Waid: So when they're describing this article in query.
457
01:07:51.360 --> 01:08:05.880
Brandie Waid: They talk about questioning the tab that it is questioning the task the strategies, the very ways of thinking and doing mathematics, as well as the way society is used to interpret and act in the world, so.

458
01:08:07.080 --> 01:08:11.850
Brandie Waid: And and, at the beginning of the article kind of really good job of talking about like.

459
01:08:12.900 --> 01:08:23.940
Brandie Waid: queer does it just mean queer people, particularly in the sense of queer theory it's because queer as an identity is kind of defined against.

460
01:08:24.900 --> 01:08:38.610
Brandie Waid: header row nor are heterosexual people or this gender people it's like defining yourself as a person outside of that norm that society, you know, a Pole.

461
01:08:39.240 --> 01:08:52.620
Brandie Waid: But queer as a theory and as kind of a verb is the resistance to the Norman so anything or it's not necessarily identity it's not necessarily you know.

462
01:08:53.580 --> 01:09:09.780
Brandie Waid: sexuality, gender, if anything, normative so thinking about the way that we discipline students, if we go against the norm, they were implemented we're sort of just instead of you know, the tension.

463
01:09:10.620 --> 01:09:18.570
Brandie Waid: That might be considered, something that is queer career practice because it's against the norm.

464
01:09:20.430 --> 01:09:22.770
Brandie Waid: Hopefully, one day, that will be the case, but currently.

01:09:24.360 --> 01:09:35.010
Brandie Waid: So that's this idea of this second rotation that I pulled which was mathematical inquiry goes beyond your inclusion of queer identities, families and issues into expanse.

466
01:09:35.580 --> 01:09:45.570
Brandie Waid: frameworks and allows elementary teachers and students to deconstruct and disrupt educational norm, as well as to imagine new possibilities in mathematics and in the world.

## 467

01:09:46.110 --> 01:10:02.820
Brandie Waid: And there was even an example where I talked about like we could clear time and think about like different ways to measure things to measure time as your object measure throughout history, there have been different ways, there are different columns is different with those are.

468
01:10:04.470 --> 01:10:07.980
Brandie Waid: Thinking about things in that way, I also talks about like.
469
01:10:09.150 --> 01:10:21.660
Brandie Waid: There were different shapes that were talked about on in the piece, and it says like if we asked you to click what other shapes that aren't names could there be like could we create shapes that doesn't have any.

470
01:10:22.200 --> 01:10:37.290
Brandie Waid: That sort of thing of like creation and so Those are all things that are kind of at the core of mathematical any query for Chi so i'll pause here.

471
01:10:38.700 --> 01:10:49.440
Brandie Waid: If you're able to read our core, even if you weren't i'm based from what I just said, are there any questions that you have some of the pond while you are reading.

472
01:10:50.790 --> 01:10:51.750
Brandie Waid: For the found.

01:10:52.950 --> 01:10:54.900
Brandie Waid: This product for you or thoughts.

## 474

01:11:20.940 --> 01:11:21.690
Brandie Waid: So Lisa.

475
01:11:39.210 --> 01:11:39.600
Brandie Waid: Okay.
476
01:11:40.680 --> 01:11:44.400
Brandie Waid: If we don't have any questions at this moment that's fine we'll go into.

## 477

01:11:45.720 --> 01:11:49.260
Brandie Waid: A possible example and then we'll see if that brings up anything.

478
01:11:50.820 --> 01:11:56.130
Brandie Waid: So this next slide which is like seven.
479
01:11:57.300 --> 01:12:00.030
Brandie Waid: So if you have it open on your screen.
480
01:12:01.200 --> 01:12:04.080
Brandie Waid: If you'll notice all of your names here.

481
01:12:05.370 --> 01:12:12.750
Brandie Waid: So what we're gonna do is we're going to look at an example, this I think i've mentioned this before, but over the summer I did a.

482
01:12:14.370 --> 01:12:23.940
Brandie Waid: Summer enrichment program for your class students entering grades nine through 12 and we spent a lot of time looking at.

483
01:12:24.690 --> 01:12:33.690

Brandie Waid: Different than elements of queer culture correct identity, you know anything that they were interested we played minecraft like we did all sorts of things.

484
01:12:34.170 --> 01:12:45.300
Brandie Waid: Just they enjoyed and we're in a career space together and trying to relate and to mathematics in as authentic and meaningful ways is because.

485
01:12:46.860 --> 01:13:02.370
Brandie Waid: So some of the beginning, in particular, of that camp was or enrichment, or whatever your cause was having them practice posing that medical question because I wanted them to like see mathematics in the world.

486
01:13:03.810 --> 01:13:19.200
Brandie Waid: So we did some noticing and wondering questions with several different things you saw one in the blog post that I wrote about the Babylon revoir, which was that clear image, so we posed questions about that.

487
01:13:20.370 --> 01:13:29.760
Brandie Waid: But we also looked at various graph and different representation, we listened to a podcast and post questions they found the podcast about queer money shares.

488
01:13:31.650 --> 01:13:48.600
Brandie Waid: So those were various things that we did throughout, so what i'm going to get you to do is look at one of the images that we looked at, which is this image of the percent of US adults that identifies LGBT Q or LGBT.

489
01:13:49.980 --> 01:13:53.940
Brandie Waid: of Americans and then the.
490
01:13:55.080 --> 01:13:58.080
Brandie Waid: Questions you're going to just see what do you notice what you wonder.
491
01:13:59.880 --> 01:14:13.050
Brandie Waid: And we're going to take i'm going to play a song and let you think about what questions and what notice things you're, seeing as you look through this image and then we'll come back together and share out but.

01:14:14.400 --> 01:14:19.650
Brandie Waid: To show you what these things are, if you click on your name, this is actually a Google Johnny.

493
01:14:21.120 --> 01:14:34.170
Brandie Waid: So this is just like your scratch paper, essentially, if you want to type the questions off the side, if you want to you know draw pictures on it, I will john you put your stuff but you know you can circle thing with the various shapes.

494
01:14:35.430 --> 01:14:38.310
Brandie Waid: To call out to text boxes highlight things.

495
01:14:39.750 --> 01:14:43.380
Brandie Waid: Whatever floats your boat, or you cannot use it at all and just look at it.
496
01:14:44.490 --> 01:14:45.120
Brandie Waid: So.

497
01:14:46.230 --> 01:14:51.600
Brandie Waid: Are there any questions about what we're going to do, while we play this song.
498
01:14:53.040 --> 01:14:54.480
Brandie Waid: We are such papers.
499
01:15:07.680 --> 01:15:17.010
Brandie Waid: i'm not gonna put on the keys and Ruth playlist will listen to one song wow come up with that one.

500
01:20:32.070 --> 01:20:32.850
Brandie Waid: Oh right.
501
01:20:34.230 --> 01:20:40.770

Brandie Waid: Leave it to firefighter choose the one time it's like seven minutes long when I measure timing song.

502
01:20:42.780 --> 01:20:43.350
Brandie Waid: So.

503
01:20:45.060 --> 01:20:49.380
Brandie Waid: Why are we thinking and he noticing and wondering oh I.
504
01:20:51.390 --> 01:20:53.160
Brandie Waid: have some in the dust now already.
505
01:20:54.900 --> 01:20:58.410
Brandie Waid: So gen $Z$ is only listed up to 2002.

506
01:20:59.550 --> 01:21:03.750
Brandie Waid: mm hmm not they're not considered adult yet yeah that makes sense.
507
01:21:05.010 --> 01:21:12.000
Brandie Waid: 2017 the oldest and gen Z we're not yet adult that maybe that's why the red bar only issue that's the one.

508
01:21:13.560 --> 01:21:15.180
Brandie Waid: lineal seems to be increasing.
509
01:21:17.040 --> 01:21:23.640
Brandie Waid: The wonder where 5.6 is coming from, I couldn't figure out where how they were being added up to me.

510
01:21:26.100 --> 01:21:27.180
Brandie Waid: This question was that.
511
01:21:30.690 --> 01:21:32.190
Jessica Lee: Mine justice.

512
01:21:36.090 --> 01:21:40.500
Jessica Lee: I couldn't get a 5.6 and it nowhere 5.6 is coming from.

513
01:21:43.620 --> 01:21:44.670
Brandie Waid: And if you don't know that.

514
01:21:45.750 --> 01:21:49.740
Brandie Waid: that's a good question probably well um.

515
01:21:52.380 --> 01:21:56.850
Brandie Waid: Any any wondering where any comments on where that number might be coming from.

516
01:22:13.830 --> 01:22:15.510
Brandie Waid: no idea where 5.6 filter.

517
01:22:19.110 --> 01:22:27.210
Jessica Lee: it's funny because it's such a prominent number in that graph and you can add up any combo of those colors and get 5.6.

518
01:22:28.500 --> 01:22:33.780
Brandie Waid: Well that's a good, I mean this also is a good exercise and, like reading the paragraph is saying.

519
01:22:35.040 --> 01:22:37.050
Brandie Waid: So these colors themselves.

## 520

01:22:38.910 --> 01:22:46.080
Brandie Waid: Representing each generation, so this is saying of gen Z .

521
01:22:47.100 --> 01:22:50.070
Brandie Waid: 15.9\% identifying.

## 522

01:22:51.300 --> 01:22:54.180
Brandie Waid: As LGBT Q of.

523
01:22:56.940 --> 01:23:07.050
Brandie Waid: millennials 9.1 identifying as LGBT to have generation $X$ we've got 2020 and.
524
01:23:08.520 --> 01:23:15.540
Brandie Waid: we've got 3.8 they lose, we have to and then traditionally we have 1.3.
525
01:23:18.900 --> 01:23:21.450
Brandie Waid: So this is talking about to go ahead, you.
526
01:23:22.380 --> 01:23:24.930
Dewey Gottlieb (he/his): know I just what I notice here is.
527
01:23:26.580 --> 01:23:29.940
Dewey Gottlieb (he/his): The average of those five groups comes out to be six something.
528
01:23:31.080 --> 01:23:42.750
Dewey Gottlieb (he/his): So the sample was skewed outcasts a skewed there were more people in the traditionalist and baby boomers and gen X who participated in this poll probably.

## 529

01:23:44.190 --> 01:23:54.480
Brandie Waid: that's an excellent observation yeah so um you and I spend on that, like white, you can tell that from looking at from finding the.

530
01:23:55.530 --> 01:23:57.210
Brandie Waid: Average of those numbers.
531
01:24:00.780 --> 01:24:01.290
Dewey Gottlieb (he/his): yeah because.
532
01:24:02.490 --> 01:24:04.860

Dewey Gottlieb (he/his): From gen X baby boomers and traditionalist.
533
01:24:06.570 --> 01:24:14.190
Dewey Gottlieb (he/his): Because they are, they would be less than the if he just took the mean of those five data points.

534
01:24:17.280 --> 01:24:19.290
Dewey Gottlieb (he/his): That would have to have represented a larger.
535
01:24:20.880 --> 01:24:22.920
Dewey Gottlieb (he/his): Part of proportion of the sample.
536
01:24:24.030 --> 01:24:24.930
Dewey Gottlieb (he/his): In order for that.
537
01:24:25.980 --> 01:24:31.830
Dewey Gottlieb (he/his): That be to be less than or in order for that this this conclusion, a 5.6\%.
538
01:24:33.090 --> 01:24:35.760
Dewey Gottlieb (he/his): To be less than that, then the mean of those groups so let's go.
539
01:24:38.190 --> 01:24:41.250
Dewey Gottlieb (he/his): The sample did not have equal size groups for each of these.
540
01:24:42.540 --> 01:24:43.710
Dewey Gottlieb (he/his): Generations, if you would.
541
01:24:47.010 --> 01:24:52.290
Brandie Waid: Do that there's a question what the sample representative yeah.
542
01:24:54.690 --> 01:25:01.080
Dewey Gottlieb (he/his): And that was one of the questions I wrote on my little scratch pad it's just what was the sample and even how how the data was collected.

543
01:25:02.970 --> 01:25:04.080
Dewey Gottlieb (he/his): i'm assuming it was.

544
01:25:05.280 --> 01:25:08.820
Dewey Gottlieb (he/his): Some online type of response, but you know that or no.
545
01:25:10.560 --> 01:25:10.890
yeah.
546
01:25:13.170 --> 01:25:13.800
Dewey Gottlieb (he/his): Exactly yeah.
547
01:25:17.760 --> 01:25:17.910
i'm.

548
01:25:19.230 --> 01:25:22.050
Dewey Gottlieb (he/his): pretty sure gen $Z$ wasn't mailing in a card to.
549
01:25:23.520 --> 01:25:25.200
Dewey Gottlieb (he/his): indicate a response.
550
01:25:26.040 --> 01:25:26.730
Probably.
551
01:25:30.150 --> 01:25:36.900
Brandie Waid: Well, and it also like I mean, these are all different things that we can we can look into if we're really curious about this.

552
01:25:39.180 --> 01:25:44.280
Brandie Waid: When we're talking about this idea of representative sample also thinking about like.

Brandie Waid: Which generation currently has the most adults in it.
554
01:25:50.910 --> 01:26:01.620
Brandie Waid: In the United States, so like is represented, and when we think of representatives that way in terms of adults, or are we wanting it to be, you know this idea of.

555
01:26:02.880 --> 01:26:11.550
Brandie Waid: an equal number of groups street what does that truly means So those are really interesting mathematical questions to kind of consider with students as well.

556
01:26:13.080 --> 01:26:24.330
Brandie Waid: Do you want to hop back to just the question with a 5.6 so each of these just good does that make sense, what Ray was saying about the.

557
01:26:25.380 --> 01:26:28.770
Brandie Waid: Individual percentages and the average or the mean.
558
01:26:30.120 --> 01:26:33.270
Brandie Waid: compound with higher than this 5.6.
559
01:26:36.540 --> 01:26:37.800
Jessica Lee: I mean it's.
560
01:26:39.240 --> 01:26:43.620
Jessica Lee: kind of I thought about it and, like jen's ease, not one fifth of the population right.

561
01:26:43.800 --> 01:26:45.960
Jessica Lee: millennial population.

562
01:26:46.500 --> 01:26:46.950
Right.
563
01:26:48.030 --> 01:26:54.090
Jessica Lee: So I mean it just it's a fancy number but it's kind of misleading in some ways, like.

01:26:56.250 --> 01:27:00.750
Jessica Lee: People who are looking at the graph thoroughly or or whatever won't.

565
01:27:01.770 --> 01:27:03.120
Jessica Lee: think twice about the number.
566
01:27:04.080 --> 01:27:05.250
Brandie Waid: Now I agree.

567
01:27:08.040 --> 01:27:12.990
Brandie Waid: And I think that's a really good exploration as well with students like what does it mean.

568
01:27:14.280 --> 01:27:26.160
Brandie Waid: Like what is this 5.6 million in relation to these other these other colors and other you know elements of the buyback that was going on, so those are excellent question.

569
01:27:27.090 --> 01:27:34.650
Jessica Lee: Like opens up a whole conversation about which generation is in command right now right because nationalists are probably.

570
01:27:35.460 --> 01:27:43.140
Jessica Lee: retiring and gen $Z$ is an older they're barely old enough to like have any buying power in society right now.

## 571

01:27:43.590 --> 01:27:46.920
Brandie Waid: we're talking about millennials don't have any buying power, either we don't have any money.

572
01:27:54.390 --> 01:27:55.200
Jessica Lee: that's tough.
573
01:27:57.480 --> 01:27:57.930

Brandie Waid: yeah.
574
01:27:59.370 --> 01:28:00.990
Brandie Waid: that's a good point, though, so so.
575
01:28:02.490 --> 01:28:03.570
Brandie Waid: So.

576
01:28:05.310 --> 01:28:14.520
Brandie Waid: Other wondering, we had, I wonder, or worry about the ways in which this graph may be used to make an accurate assumptions about different population, which was that.

## 577

01:28:17.160 --> 01:28:29.040
Steph (She/her; treaty 6 ): That was me, I guess, I was scanning like I scanned over the graph pretty quick and I mean this builds a little bit on what JESSICA was saying, but.

## 578

01:28:29.880 --> 01:28:43.890
Steph (She/her; treaty 6): Like I feel like this graph could very easily be used to push particular political agendas be like look only $5.6 \%$ of the population are LGBT Q plus.

579
01:28:44.940 --> 01:28:48.120
Steph (She/her; treaty 6): But, almost all of them are in this generation.
580
01:28:48.120 --> 01:28:49.980
Steph (She/her; treaty 6): So we don't really care right like or.

## 581

01:28:50.580 --> 01:28:52.410
Steph (She/her; treaty 6): You know I don't know it just.

582
01:28:54.270 --> 01:28:55.530
Steph (She/her; treaty 6): And also i'm just thinking.
583
01:28:55.530 --> 01:28:56.730
Steph (She/her; treaty 6): About sort of.

01:28:57.210 --> 01:29:03.300
Steph (She/her; treaty 6): How millennials like what millennials experienced as far as like critiquing went by other.

585
01:29:05.310 --> 01:29:15.180
Steph (She/her; treaty 6): generations and i'm looking at this and i'm like could this graph be used by sort of the older generations to critique gen $Z$.

586
01:29:15.720 --> 01:29:18.300
Steph (She/her; treaty 6): Ladies like particular Do you know what I mean like.

587
01:29:19.470 --> 01:29:25.350
Steph (She/her; treaty 6): It shouldn't be used that way, but I worried that it might be just because it's so misleading.

588
01:29:26.040 --> 01:29:30.390
Brandie Waid: yeah well, that your comments, making me think of them.

589
01:29:32.460 --> 01:29:38.580
Brandie Waid: I can't remember the name of the book because it's terrible anyway, and I shouldn't it shouldn't exist but.

590
01:29:39.780 --> 01:29:55.230
Brandie Waid: The one that abigail schreier wrote recently that was like you know the transgender craze that you know taken over our girls, or whatever our children, so it makes me.

591
01:29:56.160 --> 01:30:09.840
Brandie Waid: Your comment is making me think like abigail trying to show this and be like see we've got more of our children being like swayed into this quote unquote view of the world.

592
01:30:11.340 --> 01:30:11.880
Steph (She/her; treaty 6): yeah.

01:30:11.970 --> 01:30:13.350
Brandie Waid: very good point.

594
01:30:14.490 --> 01:30:14.820
Brandie Waid: yeah.

595
01:30:17.250 --> 01:30:27.420
Jessica Lee: I mean you could make this a branching off point for like the yellow and red bars are really when the information age kind of hit.

596
01:30:27.930 --> 01:30:28.470
Jessica Lee: So, like.
597
01:30:28.710 --> 01:30:33.480
Jessica Lee: access and understanding to being LGBT Q.
598
01:30:34.710 --> 01:30:42.390
Jessica Lee: was more accessible so that's why the bars are so different like I like it could be a whole discussion on.

599
01:30:43.920 --> 01:30:46.500
Jessica Lee: Like yeah generational differences.
600
01:30:47.850 --> 01:30:53.700
Dewey Gottlieb (he/his): yeah I was thinking kind of similarly you adjust them with respect to you if you.

601
01:30:54.960 --> 01:30:58.560
Dewey Gottlieb (he/his): Will for this particular Defense But then when.
602
01:30:59.970 --> 01:31:01.770
Dewey Gottlieb (he/his): The marriage became legal United States.
603
01:31:02.610 --> 01:31:02.820

You know.

604
01:31:04.170 --> 01:31:10.140
Dewey Gottlieb (he/his): They don't what what is the cases that have for people of different ages being.

605
01:31:12.030 --> 01:31:14.910
Dewey Gottlieb (he/his): feeling more free to identify themselves.

## 606

01:31:16.560 --> 01:31:20.490
Dewey Gottlieb (he/his): Because when you think about like i'm generation X so, and you know.

607
01:31:21.630 --> 01:31:31.710
Dewey Gottlieb (he/his): The elders above older than me, you know, going back to the comment that I said earlier about them that's talking about my problem that could clear.

608
01:31:32.820 --> 01:31:44.490
Dewey Gottlieb (he/his): And I would I at that time, I would have been very even five years ago, I still would have been very uncomfortable you want to take it a lot of courage for me to make one of those one or more of those.

609
01:31:45.870 --> 01:31:47.400
Dewey Gottlieb (he/his): married couples same gender.

610
01:31:48.810 --> 01:31:52.350
Dewey Gottlieb (he/his): And that kind of you know I just kind of thinking, but generationally.

611
01:31:53.370 --> 01:31:59.130
Dewey Gottlieb (he/his): You know that the experiences that fear that we had about coming out many of us.

612
01:32:00.300 --> 01:32:01.710
Dewey Gottlieb (he/his): It was it was different.

01:32:02.910 --> 01:32:10.350
Dewey Gottlieb (he/his): And when I follow people on instagram these young queer teachers who are just doing these things that i'm like so amazed by.

614
01:32:11.430 --> 01:32:11.670
Dewey Gottlieb (he/his): got.
615
01:32:11.910 --> 01:32:14.430
Dewey Gottlieb (he/his): back of my head, I think I would never have the guts to do that.
616
01:32:14.700 --> 01:32:18.240
Dewey Gottlieb (he/his): And that's part of because of the experience, not making an excuse for it that's.

617
01:32:18.480 --> 01:32:31.290
Dewey Gottlieb (he/his): Clearly internalized internalized homophobia, as part of that I get that but still it's just that the generation come from that that's a sudden, I think this graph kind of kind of building on what JESSICA said there's another.

618
01:32:32.700 --> 01:32:35.490
Dewey Gottlieb (he/his): That that's just another thing that prompted my thinking.
619
01:32:36.390 --> 01:32:45.990
Brandie Waid: yeah and I know kind of relates to what that's the thing about except with a free thing i'm adding increase over the years, I put a line there because that's when.

620
01:32:48.210 --> 01:32:50.490
Brandie Waid: The gay marriage was legalized.
621
01:32:51.840 --> 01:32:57.210
Brandie Waid: or recognized in the United States, so we do start seeing a shift after this.
622
01:32:59.610 --> 01:33:06.570
Brandie Waid: yeah I think those are all and I, and it also brings to mind theory that like.

01:33:08.310 --> 01:33:15.000
Brandie Waid: It brings to mind actually a blog post that the non binary color shane Martin.
624
01:33:16.050 --> 01:33:17.340
Brandie Waid: wrote a little while ago.
625
01:33:18.690 --> 01:33:28.710
Brandie Waid: But they were talking about how they were essentially saying straight teachers, the teachers do not rely on your LGBT Q plus.

626
01:33:29.790 --> 01:33:37.080
Brandie Waid: Co workers to do this work, because in some cases it's more dangerous and many cases it's more dangerous for us.

## 627

01:33:38.520 --> 01:33:52.890
Brandie Waid: So, including ourselves and in these problems can be much more dangerous than a straight person or this person someone who's not part of the Community, including those representations.

628
01:33:54.360 --> 01:33:58.110
Brandie Waid: In the classroom and there's much less at stake essentially.
629
01:33:59.190 --> 01:34:12.420
Brandie Waid: And I have conversations about times, particularly with straight white men who were like you know i'm doing this in my costume because no one's going to say anything to me and like that's great but also that's terrible.

630
01:34:14.970 --> 01:34:20.910
Brandie Waid: grapes are doing it, and we need more people to do it, but also it kind of sucks but that's the reality.

631
01:34:23.370 --> 01:34:23.790
Brandie Waid: yeah.

01:34:26.610 --> 01:34:30.630
Brandie Waid: Any other noticing or wondering, do you wanna pass out there.

633
01:34:31.980 --> 01:34:40.380
Brandie Waid: or any thoughts about how this could invoke or does invoke the attendance of mathematical inquiry and that ran subscribe.

634
01:34:56.460 --> 01:35:01.140
Jessica Lee: If you are able to source that shane Martin article i'd like to see it.

635
01:35:02.520 --> 01:35:04.050
Brandie Waid: yeah i'll find it and.
636
01:35:05.220 --> 01:35:07.380
Brandie Waid: put it on the website and email it as well.
637
01:35:11.190 --> 01:35:14.730
Jessica Lee: emails are super helpful, I never remember the password I set up to my website.

638
01:35:15.030 --> 01:35:15.360
Jessica Lee: I have to.

639
01:35:15.660 --> 01:35:17.040
Brandie Waid: Everyone that's.
640
01:35:17.730 --> 01:35:19.620
Brandie Waid: that's Dr inside include the email as well.

641
01:35:24.960 --> 01:35:25.920
Brandie Waid: anyone else have any thoughts.
642
01:35:31.830 --> 01:35:41.820

Dewey Gottlieb (he/his): And I think just including that even similarly to how you pose the question to us and we, I mean there's there's a lot of mathematics discuss with that to uncover and.

643
01:35:42.540 --> 01:35:51.720
Dewey Gottlieb (he/his): You know, in an unconventional way because the context is anyway, you know it's just there's so many questions you can ask.

644
01:35:52.890 --> 01:35:54.090
Dewey Gottlieb (he/his): And the kids explore.

645
01:35:55.620 --> 01:35:56.070
yeah.
646
01:35:57.720 --> 01:36:05.670
Dewey Gottlieb (he/his): We don't look for opportunities to to investigate or talk about mathematics in career context is.

647
01:36:07.530 --> 01:36:09.240
Dewey Gottlieb (he/his): a missed opportunity, really.
648
01:36:11.610 --> 01:36:11.970
Good.

649
01:36:13.260 --> 01:36:18.120
Trena Wilkerson (she/her): So, and also do with you saying that it makes makes me wonder i'm.

650
01:36:19.410 --> 01:36:20.970
Trena Wilkerson (she/her): Out of people's biases.
651
01:36:22.770 --> 01:36:31.050
Trena Wilkerson (she/her): How not people's how to our biases and how they might influence the mathematics that we might ask about.

01:36:32.490 --> 01:36:32.850
Brandie Waid: yeah.

653
01:36:34.740 --> 01:36:35.160
Trena Wilkerson (she/her): You know.

654
01:36:36.840 --> 01:36:39.240
Trena Wilkerson (she/her): The questions that we would or would not pose.
655
01:36:41.730 --> 01:36:58.500
Brandie Waid: Exactly and and this group was like this group of kids over the summer, they were incredible and there was one particular so I just love that girl, she would often she actually lived in Germany.

656
01:36:59.850 --> 01:37:14.490
Brandie Waid: I have no idea how she figured like found out about am but she did she joined to join us every every week, and she has such a rich like socio political context.

657
01:37:15.300 --> 01:37:27.690
Brandie Waid: For both Germany and the United States, so every time we would look at an image like this, or you know talk about various things she would say you know well.

658
01:37:28.800 --> 01:37:47.760
Brandie Waid: You know this is a really interesting representation, but I wonder like what does it look like for like black and indigenous people like what would what it looks like what it, you know and then she say Okay, I wonder how this like relates to.

659
01:37:49.860 --> 01:38:04.830
Brandie Waid: It except like what you were saying stuff like so so we like found graph but compared this to accept them and, like what are the data points within the years it's only 2014 2017 and 2020 so can we find other years.

660
01:38:06.540 --> 01:38:09.450
Brandie Waid: And they asked phenomenal questions in relation.

01:38:10.590 --> 01:38:17.070
Brandie Waid: To the to the things they also made kind of terrible but funny statements like they were noticing that.

662
01:38:19.530 --> 01:38:20.250
Brandie Waid: we've got.
663
01:38:21.420 --> 01:38:28.140
Brandie Waid: millennial it looks like they're increasing and identification over time, which they also wondered like, why is it.

664
01:38:28.950 --> 01:38:45.480
Brandie Waid: That more millennials over time are identifying as LGBT Q plus so we talked about you know coming out later in life, we talked about like in 2014 you know, maybe we looked at the numbers are all of them adults, at that point, like what what is it we're looking at.

665
01:38:47.430 --> 01:38:55.170
Brandie Waid: And then, they also notice that, for the baby boomers and the traditionalist that the numbers were decreasing.

666
01:38:56.190 --> 01:39:02.430
Brandie Waid: Someone posts, a question like, why are they eat what it looks like there's decrease and then scholars like wolves are dying.

667
01:39:03.810 --> 01:39:05.370
Brandie Waid: I was like okay.

668
01:39:07.410 --> 01:39:12.900
Brandie Waid: We had a very relevant you know perspective to bring in.

669
01:39:14.400 --> 01:39:25.350
Brandie Waid: And yes, it was quite morbid but also It shows that she in the other members of the cohort were really engaging with mathematics and thinking about like why what it presents in that way.

01:39:26.820 --> 01:39:27.690
Brandie Waid: which I thought was.

671
01:39:28.200 --> 01:39:28.920
Brandie Waid: was really nice.

672
01:39:29.430 --> 01:39:32.340
Brandie Waid: So um any other thoughts are coming up for people.
673
01:39:39.720 --> 01:39:58.710
Steph (She/her; treaty 6): It kind of makes me think of this book, I read years ago called weaponized lies, and it was this author had gone through and pulled out different graphics from news news stations and stuff and talked about how we can sort of tell ya weaponized lies yeah.

674
01:40:00.090 --> 01:40:04.410
Steph (She/her; treaty 6): um I can email the the link to the book.
675
01:40:04.770 --> 01:40:07.050
Steph (She/her; treaty 6): But yeah and I just.
676
01:40:07.110 --> 01:40:26.250
Steph (She/her; treaty 6): I found it interesting a lot of what the author was talking about was like when you disclose all these sort of social contextual pieces and just present this graphic or the mathematics um you know you're essentially like using mathematics to weaponize information.

677
01:40:28.950 --> 01:40:31.230
Steph (She/her; treaty 6): So that's that's all I was thinking about.
678
01:40:33.330 --> 01:40:36.570
Brandie Waid: yeah it's true, and it may cost to make me think about.
679
01:40:38.070 --> 01:40:42.390
Brandie Waid: Something we did we actually had kind, who is.

01:40:42.570 --> 01:40:59.340
Brandie Waid: A who was on candidates drag race, I can have no idea is diary time stop by and talk to the kids and kind actually if you don't follow kind on social media and she goes by the handle online time.

681
01:41:00.720 --> 01:41:01.290
Brandie Waid: Which i'll type.

682
01:41:03.360 --> 01:41:03.720
Brandie Waid: In.

683
01:41:05.190 --> 01:41:12.840
Brandie Waid: And I believe trends on Twitter but mostly is on instagram and take stock and make.

## 684

01:41:15.360 --> 01:41:17.430
Brandie Waid: videos about mathematics and drag.

685
01:41:18.480 --> 01:41:29.670
Brandie Waid: So one of the videos that we showed was about Kobe numbers and looking at the graph and that this is the idea of weaponized life.

686
01:41:30.030 --> 01:41:50.010
Brandie Waid: The way that the grass was presented it looked like the closing numbers are going down, but if it was actually for Georgia Georgia state like Department of Health released this picture the fast, and it was going down, but if you look at the axes, like the most well out of order.

687
01:41:51.420 --> 01:41:51.930
Brandie Waid: Like.

688
01:41:53.160 --> 01:42:00.120
Brandie Waid: presented this notion that commentators were actually going down, but that was not reality at all.

01:42:01.260 --> 01:42:04.350
Brandie Waid: So that's what that made me to go to church.
690
01:42:05.970 --> 01:42:07.260
Brandie Waid: I don't know how that happened.

691
01:42:09.060 --> 01:42:09.660
Brandie Waid: There you go.
692
01:42:12.060 --> 01:42:27.210
Brandie Waid: Alright, so we're heading up on the end of our time here, so I do want to close this out, but there are a couple of things so next time for next time there's an article that I wrote with a colleague, which is going to get into some of the idea of.

693
01:42:28.500 --> 01:42:29.130
Brandie Waid: kind of what.

694
01:42:31.140 --> 01:42:37.980
Brandie Waid: You were mentioning with the cahoots problem and also what we were talking about in relation to the.

695
01:42:40.170 --> 01:42:41.700
Brandie Waid: The problem that do we shared.
696
01:42:43.110 --> 01:42:44.250
Brandie Waid: Where.

697
01:42:45.750 --> 01:42:56.310
Brandie Waid: We have very end and Jessica shared where we have very binary assumptions and like we're presented with information and how to talk about those things with students.

698
01:42:56.760 --> 01:43:04.050
Brandie Waid: So this article, in particular, whereas kasserine yay and lori ruble talk about you know.

699
01:43:04.950 --> 01:43:19.980
Brandie Waid: A set of questions that teachers can use to look at their curriculum to see how to clear it or you know broaden you know the the borders and boundaries that we put in the contact dish article that I wrote with a colleague.

700
01:43:21.330 --> 01:43:36.630
Brandie Waid: In a set of questions that we can do this with today, so if we have a contact that is restrictive, how do we use the questions that were students, so that they can start thinking about the world a little bit more critically.

## 701

01:43:37.770 --> 01:43:47.520
Brandie Waid: when they engage with these graphs are with you know, whatever it is that they're engaging with in in the text and that's that's another thing here in this.

702
01:43:48.510 --> 01:43:59.130
Brandie Waid: The word Texas used a lot, and that is very broadly in a mathematical sense that would be like the graph they see or a mean can be a text or you know.

703
01:44:00.900 --> 01:44:05.850
Brandie Waid: Whatever whatever it is you're using and mathematics as that quote unquote can be a text.

704
01:44:07.290 --> 01:44:08.790
Brandie Waid: So that.

705
01:44:09.900 --> 01:44:14.010
Brandie Waid: We can bring that in preparation of next week and then here.
706
01:44:15.150 --> 01:44:23.070
Brandie Waid: These are just some of the wondering like we talked about them, but if you want to career some of the wondering, that the kids came up during the camp there in this.

707
01:44:24.300 --> 01:44:33.600
Brandie Waid: slide show and then also some of the next week i'll share some of the activities that I designed around their questions, because the first half of the camp was like.

708
01:44:33.960 --> 01:44:40.890
Brandie Waid: let's pose all the question let's practice posing questions and then the second half of the camp like okay let's go explore them.

709
01:44:42.060 --> 01:44:45.150
Brandie Waid: So that was kind of the idea for that.

710
01:44:46.440 --> 01:44:48.300
Brandie Waid: So if you want to look through those.
711
01:44:49.920 --> 01:45:02.460
Brandie Waid: And as you do, that think about like what mathematical activities because we designed to explore the wondering, while sticking to the tenants of methodical inquiry and then there's to keep that core So if you.

712
01:45:04.320 --> 01:45:06.780
Brandie Waid: want to share some feedback and say.
713
01:45:07.830 --> 01:45:14.700
Brandie Waid: The granddaddy of doing this annoying thing that you keep doing or keep doing this thing that helps me.

714
01:45:15.930 --> 01:45:25.800
Brandie Waid: Go for it tell me more and like to talk about xyz I just let me know um any questions before we head out Thank you.

715
01:45:31.050 --> 01:45:35.280
Brandie Waid: For any last thoughts or comments we want to share.
716
01:45:49.950 --> 01:45:50.310
Trena Wilkerson (she/her): Thank you.
717
01:45:51.690 --> 01:46:01.680

Trena Wilkerson (she/her): Thank you all for allowing me to come in, after so many weeks of not being able to be here, but I appreciate so much you've been so welcoming.

718
01:46:03.000 --> 01:46:03.720
Brandie Waid: To joining.

719
01:46:07.470 --> 01:46:11.430
Brandie Waid: Also, there are there's just made me think about.
720
01:46:12.600 --> 01:46:17.310
Brandie Waid: So often, these pictures that I found this five they're just things that like I want on your radar.

721
01:46:18.330 --> 01:46:20.640
Brandie Waid: This is a book if you're interested.
722
01:46:21.660 --> 01:46:26.040
Brandie Waid: You know, and you want to read about career history history, and I think for young people.

723
01:46:27.510 --> 01:46:33.630
Brandie Waid: was really helpful in my own learning career history of simple that I didn't know.
724
01:46:35.190 --> 01:46:42.450
Brandie Waid: There are a number of you know pictures here of Queens that clear authors are clear artists made.

725
01:46:45.210 --> 01:46:49.020
Brandie Waid: This is not an artist, but beats a Butler does a lot of quote work.
726
01:46:50.160 --> 01:46:57.390
Brandie Waid: that's really beautiful, and this is a piece that was created for LGBT Q plus history month so i'm.

01:46:58.470 --> 01:47:00.300
Brandie Waid: Just putting those things out there.

## 728

01:47:01.740 --> 01:47:03.660
Brandie Waid: But the images aren't where they came from.
729
01:47:08.340 --> 01:47:08.730
Brandie Waid: alright.
730
01:47:09.900 --> 01:47:16.680
Brandie Waid: Well y'all have a good night, if you want to come on next Thursday well or not Thursday Tuesday.

731
01:47:17.880 --> 01:47:28.260
Brandie Waid: I have my office hour, if you want to stop by and talk about a little stuff or just you know hang out eat dinner with me feel free to um it's not obviously.

732
01:47:33.090 --> 01:47:35.910
Dewey Gottlieb (he/his): Thanks brandon thanks everyone that was great chatting today.
733
01:47:36.780 --> 01:47:37.380
Brandie Waid: Have a good one.
734
01:47:38.010 --> 01:47:38.370
Trena Wilkerson (she/her): And I.
735
01:47:39.090 --> 01:47:40.020
Brandie Waid: You know my all.

736
01:47:40.560 --> 01:47:41.190
Dewey Gottlieb (he/his): Take care everyone.

