

1  
00:00:20,629 --> 00:00:27,799  
hello and welcome to the skeptics own

2  
00:00:23,370 --> 00:00:30,810  
episode number 36 for the 26th of june

3  
00:00:27,800 --> 00:00:32,668  
2009 Richard Saunders here with you in

4  
00:00:30,809 --> 00:00:35,640  
today's episode we have an interview

5  
00:00:32,668 --> 00:00:38,969  
with Theo Clark now Theo Clark and his

6  
00:00:35,640 --> 00:00:42,450  
dad Jeff Clark produce a podcast called

7  
00:00:38,969 --> 00:00:43,799  
hunting humbug 101 all about logical

8  
00:00:42,450 --> 00:00:47,010  
fallacies and we'll get to that

9  
00:00:43,799 --> 00:00:49,289  
interview soon and after that we have a

10  
00:00:47,009 --> 00:00:52,738  
talk by Kylie Sturgis a talk she gave

11  
00:00:49,289 --> 00:00:55,649  
last year belief in weird things recent

12  
00:00:52,738 --> 00:00:58,349  
developments and educational directions

13  
00:00:55,649 --> 00:01:02,448  
so sit back have a glass of nice cold

14  
00:00:58,350 --> 00:01:02,448  
root beer and enjoy the skeptics

15  
00:01:11,250 --> 00:01:16,180  
Theo Clark is a former teacher who now

16  
00:01:14,140 --> 00:01:18,609  
writes science curriculum in the state

17  
00:01:16,180 --> 00:01:21,490  
of Queensland Australia he is co-author

18  
00:01:18,609 --> 00:01:24,280  
of humbug skeptics guide to spotting

19  
00:01:21,489 --> 00:01:27,640  
fallacies in thinking and produces a

20  
00:01:24,280 --> 00:01:29,439  
podcast hunting humbug 101 he still

21  
00:01:27,640 --> 00:01:33,030  
tells people he's a teacher rather than

22  
00:01:29,439 --> 00:01:41,500  
a bureaucrat you can check him out at ww

23  
00:01:33,030 --> 00:01:44,049  
skeptics field guide net and joining me

24  
00:01:41,500 --> 00:01:46,689  
now from sunny Brisbane in Queensland

25  
00:01:44,049 --> 00:01:48,969  
Australia is Theo Clark hello Theo g'day

26  
00:01:46,689 --> 00:01:51,519  
Richard it's great to be with you yeah

27  
00:01:48,969 --> 00:01:52,870  
about time too I and your pot I've been

28  
00:01:51,519 --> 00:01:55,780  
listening to your podcast for quite a

29

00:01:52,870 --> 00:01:58,060  
long time now the hunting humbug 101 a

30  
00:01:55,780 --> 00:02:00,010  
couple of questions now this is based on

31  
00:01:58,060 --> 00:02:02,920  
the book the skeptics guide to spotting

32  
00:02:00,010 --> 00:02:05,800  
fallacies in thinking what what what

33  
00:02:02,920 --> 00:02:09,009  
made you and your dad Jeff decide to

34  
00:02:05,799 --> 00:02:11,709  
create such a book yeah well it's kind

35  
00:02:09,009 --> 00:02:13,989  
of an ongoing project i guess and dad

36  
00:02:11,709 --> 00:02:17,050  
was probably my father jeff was probably

37  
00:02:13,989 --> 00:02:19,330  
one who instigated it in some of the

38  
00:02:17,050 --> 00:02:22,630  
courses he was teaching at a particular

39  
00:02:19,330 --> 00:02:25,030  
University up here in Brisbane woollen

40  
00:02:22,629 --> 00:02:29,319  
malulu let's call it that for now and

41  
00:02:25,030 --> 00:02:31,360  
and basically you know marking students

42  
00:02:29,319 --> 00:02:33,489  
essays and so on he explained to them in

43  
00:02:31,360 --> 00:02:35,200

detail why they were making mistakes and

44

00:02:33,489 --> 00:02:36,550

reasoning and instead of just being able

45

00:02:35,199 --> 00:02:38,768

to use a single term he'd have to you

46

00:02:36,550 --> 00:02:40,000

know outline it and repeat it and he

47

00:02:38,769 --> 00:02:42,459

just got sick of it happening so he

48

00:02:40,000 --> 00:02:45,639

initially made a small kind of you know

49

00:02:42,459 --> 00:02:47,319

worksheet on fallacies and then from

50

00:02:45,639 --> 00:02:50,169

just our conversations we had when I

51

00:02:47,319 --> 00:02:53,439

came back from teaching overseas on the

52

00:02:50,169 --> 00:02:55,109

UK in 2004 we just just started building

53

00:02:53,439 --> 00:02:57,400

up and said why don't we write a book

54

00:02:55,110 --> 00:03:00,060

you know because all the other logic

55

00:02:57,400 --> 00:03:04,390

books you see a very dry and technical

56

00:03:00,060 --> 00:03:05,530

and they and you know there was very

57

00:03:04,389 --> 00:03:07,119

good books out there but a lot of them

58  
00:03:05,530 --> 00:03:09,640  
are quite expensive too so the lessons

59  
00:03:07,120 --> 00:03:11,500  
make any expensive guidebook and we

60  
00:03:09,639 --> 00:03:13,419  
framed it around the idea of just you

61  
00:03:11,500 --> 00:03:15,639  
know you're hunting for fallacies you're

62  
00:03:13,419 --> 00:03:17,979  
looking for fallacies and more of a

63  
00:03:15,639 --> 00:03:19,659  
sport I suppose than the necessary the

64  
00:03:17,979 --> 00:03:22,959  
whole philosophical background from

65  
00:03:19,659 --> 00:03:24,849  
fallacies en right and it's interesting

66  
00:03:22,960 --> 00:03:28,629  
i have a very early copy of your book

67  
00:03:24,849 --> 00:03:31,269  
here in front of me now the there are

68  
00:03:28,629 --> 00:03:33,069  
many logical fallacies as described in

69  
00:03:31,270 --> 00:03:36,219  
the book and and your podcast which

70  
00:03:33,069 --> 00:03:38,829  
we'll get to in a moment did you and

71  
00:03:36,219 --> 00:03:41,050  
your dad come up with the terms for

72  
00:03:38,830 --> 00:03:43,630  
these fallacies or they known already

73  
00:03:41,050 --> 00:03:46,420  
know I'm example because it we've got

74  
00:03:43,629 --> 00:03:48,539  
the the false compromise the burden of

75  
00:03:46,419 --> 00:03:51,939  
proof gibberish moving the goalpost

76  
00:03:48,539 --> 00:03:56,620  
special pleading cultural origins false

77  
00:03:51,939 --> 00:03:58,870  
analogy and so on and goes so these were

78  
00:03:56,620 --> 00:04:00,280  
sort of known yeah I mean they're out

79  
00:03:58,870 --> 00:04:01,890  
there and there's many different ways of

80  
00:04:00,280 --> 00:04:04,419  
classifying and we just went from

81  
00:04:01,889 --> 00:04:06,939  
alphabetical order and then decide terms

82  
00:04:04,419 --> 00:04:09,969  
we just thought well let's just we use

83  
00:04:06,939 --> 00:04:11,889  
either common ones or we went for just

84  
00:04:09,969 --> 00:04:14,020  
versions of them that we found appealing

85  
00:04:11,889 --> 00:04:15,129  
or more memorable but yes certainly or

86

00:04:14,020 --> 00:04:17,410  
like all those ones you listed yeah

87  
00:04:15,129 --> 00:04:19,899  
they're well-known terms are some of the

88  
00:04:17,410 --> 00:04:22,300  
other ones we went for such as false

89  
00:04:19,899 --> 00:04:24,759  
positioning that's more commonly known

90  
00:04:22,300 --> 00:04:28,150  
as straw man so in the ebook edition of

91  
00:04:24,759 --> 00:04:29,259  
the book which is on the web we went for

92  
00:04:28,149 --> 00:04:30,069  
straw man because we thought well

93  
00:04:29,259 --> 00:04:32,259  
actually it's a better description

94  
00:04:30,069 --> 00:04:34,569  
anyway it's more memorable so yeah I

95  
00:04:32,259 --> 00:04:36,339  
mean we haven't in the book we haven't

96  
00:04:34,569 --> 00:04:40,240  
really come up with any too many new

97  
00:04:36,339 --> 00:04:42,729  
ones but probably I think the Internet

98  
00:04:40,240 --> 00:04:46,300  
has spawned people have come up with new

99  
00:04:42,730 --> 00:04:47,620  
ways of speaking rubbish and so the

100  
00:04:46,300 --> 00:04:49,060

Internet has spawned two new one so

101

00:04:47,620 --> 00:04:51,189

we've coined some more satirical ones

102

00:04:49,060 --> 00:04:53,350

too like WTF fallacy which is you know

103

00:04:51,189 --> 00:04:55,750

technically not a fallacy yes just when

104

00:04:53,350 --> 00:04:56,919

people are making absolutely rubbish she

105

00:04:55,750 --> 00:04:58,660

just there's a certain perfect we've

106

00:04:56,918 --> 00:05:02,049

gotta withdraw otherwise you don't go to

107

00:04:58,660 --> 00:05:03,220

sleep so you can claim wtfm on but

108

00:05:02,050 --> 00:05:04,750

that's you know that's a bit more

109

00:05:03,220 --> 00:05:06,940

satirical bit tongue-in-cheek but I

110

00:05:04,750 --> 00:05:08,918

think yeah I mean these are well-known

111

00:05:06,939 --> 00:05:10,120

out there and there's probably many

112

00:05:08,918 --> 00:05:12,250

different ways of classifying many

113

00:05:10,120 --> 00:05:14,168

different terms and one of the things we

114

00:05:12,250 --> 00:05:16,149

talk to students about two is don't get

115  
00:05:14,168 --> 00:05:18,099  
hung up on the name get hung up on

116  
00:05:16,149 --> 00:05:20,679  
explaining why their reasoning is poor

117  
00:05:18,100 --> 00:05:22,330  
the name is how do you remember it and

118  
00:05:20,680 --> 00:05:23,500  
he classified but really the important

119  
00:05:22,329 --> 00:05:25,839  
thing is to actually think about where

120  
00:05:23,500 --> 00:05:27,250  
the error in reasoning is so that's

121  
00:05:25,839 --> 00:05:29,889  
probably the focus so i suppose in our

122  
00:05:27,250 --> 00:05:31,629  
podcast to is to you know these things

123  
00:05:29,889 --> 00:05:33,110  
aren't black and white which particular

124  
00:05:31,629 --> 00:05:35,389  
fallacy someone is because people

125  
00:05:33,110 --> 00:05:37,520  
sum up so just try and reflect on the

126  
00:05:35,389 --> 00:05:40,339  
reason or lack of in someone's argument

127  
00:05:37,519 --> 00:05:42,229  
and that's what comes through certainly

128  
00:05:40,339 --> 00:05:44,299  
the podcast and probably on our website

129  
00:05:42,230 --> 00:05:45,860  
and the books you know just meant to be

130  
00:05:44,300 --> 00:05:48,470  
a fun way to introduce people so that I

131  
00:05:45,860 --> 00:05:50,540  
suppose so yes the podcast is

132  
00:05:48,470 --> 00:05:52,700  
fascinating because really every episode

133  
00:05:50,540 --> 00:05:55,879  
looks at a different fallacy and

134  
00:05:52,699 --> 00:05:57,889  
thinking or logical fallacy so you read

135  
00:05:55,879 --> 00:06:00,829  
a little bit from the book you and your

136  
00:05:57,889 --> 00:06:03,800  
dad Jeff yep and then you go on with a

137  
00:06:00,829 --> 00:06:05,839  
more in-depth explanation as to why this

138  
00:06:03,800 --> 00:06:09,079  
is a fallacy and thinking yeah well I

139  
00:06:05,839 --> 00:06:11,209  
think the internet you know first of all

140  
00:06:09,079 --> 00:06:13,310  
when it started you know really taking

141  
00:06:11,209 --> 00:06:14,949  
off with web 2.0 with blogs and psalm

142  
00:06:13,310 --> 00:06:17,180  
was a really good way to start off the

143

00:06:14,949 --> 00:06:20,209  
explaining fallacies in more detail and

144  
00:06:17,180 --> 00:06:21,829  
using um real examples because that's

145  
00:06:20,209 --> 00:06:23,629  
one thing we try and do is use real

146  
00:06:21,829 --> 00:06:24,589  
examples whereas again a lot of

147  
00:06:23,629 --> 00:06:26,629  
textbooks and that they're made-up

148  
00:06:24,589 --> 00:06:28,609  
contrived example so they're not really

149  
00:06:26,629 --> 00:06:30,709  
that useful for the real world because

150  
00:06:28,610 --> 00:06:32,170  
the real world is more complicated so

151  
00:06:30,709 --> 00:06:35,509  
that's where it started and then

152  
00:06:32,170 --> 00:06:36,890  
essentially the podcast was you know we

153  
00:06:35,509 --> 00:06:39,170  
have these conversations I'm sure you're

154  
00:06:36,889 --> 00:06:40,399  
the same you need is you think taking

155  
00:06:39,170 --> 00:06:41,750  
the pub and you have these conversations

156  
00:06:40,399 --> 00:06:43,219  
with people you think is a great

157  
00:06:41,750 --> 00:06:45,889

conversation if only more people could

158

00:06:43,220 --> 00:06:48,490

hear it very a testicle of course but

159

00:06:45,889 --> 00:06:51,529

that's probably where it came from and

160

00:06:48,490 --> 00:06:53,060

in terms of elucidating or explaining

161

00:06:51,529 --> 00:06:55,339

something when you're right it takes a

162

00:06:53,060 --> 00:06:57,649

long time but when you speak it's very

163

00:06:55,339 --> 00:06:59,719

short now in hindsight editing a podcast

164

00:06:57,649 --> 00:07:02,089

I know I don't need to tell you okay

165

00:06:59,720 --> 00:07:03,770

that's actually takes some time but I

166

00:07:02,089 --> 00:07:05,449

think it's just it's more engaging and

167

00:07:03,769 --> 00:07:06,709

more interesting so even just the amount

168

00:07:05,449 --> 00:07:09,469

of feedback we've gotten from people

169

00:07:06,709 --> 00:07:11,060

just been doing a podcast it's you know

170

00:07:09,470 --> 00:07:12,560

I haven't done a proper scientific study

171

00:07:11,060 --> 00:07:13,730

and I've got my own personal biases but

172  
00:07:12,560 --> 00:07:15,500  
certainly I've gotten a lot more

173  
00:07:13,730 --> 00:07:17,180  
feedback in the short time I've been

174  
00:07:15,500 --> 00:07:18,290  
doing a podcast and we're just from the

175  
00:07:17,180 --> 00:07:20,480  
website which you've had up for about

176  
00:07:18,290 --> 00:07:22,730  
three or four years so I think that

177  
00:07:20,480 --> 00:07:24,650  
medium just allows you to really get

178  
00:07:22,730 --> 00:07:27,200  
into the nuts and bolts of it quicker

179  
00:07:24,649 --> 00:07:29,029  
and with more detail if not as

180  
00:07:27,199 --> 00:07:31,219  
necessarily and well thought out because

181  
00:07:29,029 --> 00:07:32,299  
I'm sure you agree sometimes when you

182  
00:07:31,220 --> 00:07:34,160  
listen back to some of the things you

183  
00:07:32,300 --> 00:07:36,620  
say you think what did I say that too

184  
00:07:34,160 --> 00:07:40,610  
late well I at least get to edit out my

185  
00:07:36,620 --> 00:07:44,240  
bits because I duality and are yeah my

186  
00:07:40,610 --> 00:07:46,009  
stack the deck nicely I see I see she

187  
00:07:44,240 --> 00:07:46,879  
actually said that if I should have said

188  
00:07:46,009 --> 00:07:49,939  
that you're using

189  
00:07:46,879 --> 00:07:53,379  
I mean it's very important I think for

190  
00:07:49,939 --> 00:07:56,990  
people interested in skepticism to

191  
00:07:53,379 --> 00:07:58,159  
listen to your podcast and have access

192  
00:07:56,990 --> 00:08:00,680  
to your book now your books available

193  
00:07:58,160 --> 00:08:03,110  
online as an e-book yeah as an e-book

194  
00:08:00,680 --> 00:08:05,030  
yeah that was again we thought you know

195  
00:08:03,110 --> 00:08:07,939  
the Internet has really changed the

196  
00:08:05,029 --> 00:08:10,819  
dynamic of how you are get information

197  
00:08:07,939 --> 00:08:12,199  
out there and you know the old models of

198  
00:08:10,819 --> 00:08:13,579  
trying to make money off stuff don't

199  
00:08:12,199 --> 00:08:16,670  
really work the way they used to use

200

00:08:13,579 --> 00:08:18,589  
people want information for free and we

201  
00:08:16,670 --> 00:08:20,720  
didn't write the book you know to get

202  
00:08:18,589 --> 00:08:23,119  
minted from it off boog on fallacies and

203  
00:08:20,720 --> 00:08:25,760  
not really probably making much money so

204  
00:08:23,120 --> 00:08:27,590  
once we thought we'll put up the e-book

205  
00:08:25,759 --> 00:08:29,599  
version so people can use to get to the

206  
00:08:27,589 --> 00:08:32,209  
fallacies and so on it is a little bit

207  
00:08:29,600 --> 00:08:34,430  
dead like the introductions gone the

208  
00:08:32,210 --> 00:08:36,680  
introduction in the paperbacks are more

209  
00:08:34,429 --> 00:08:38,689  
detailed and so on but you know it's

210  
00:08:36,679 --> 00:08:41,329  
let's get it out there if people want to

211  
00:08:38,690 --> 00:08:42,440  
use it in lectures or at schools and

212  
00:08:41,330 --> 00:08:44,410  
things like that they can print off a

213  
00:08:42,440 --> 00:08:46,820  
particular fallacy and look at it

214  
00:08:44,409 --> 00:08:48,409

because at the end of the day as you

215

00:08:46,820 --> 00:08:50,750

said it's so important that we have

216

00:08:48,409 --> 00:08:53,029

people starting to think critically

217

00:08:50,750 --> 00:08:56,929

about things and being a bit skeptical i

218

00:08:53,029 --> 00:08:59,299

think so i think it's it's very good to

219

00:08:56,929 --> 00:09:01,099

know and and i'm trying to remember if

220

00:08:59,299 --> 00:09:03,639

you made this point in your podcast you

221

00:09:01,100 --> 00:09:07,040

probably have felt a greater pork okay

222

00:09:03,639 --> 00:09:10,600

that we as skeptics and critical

223

00:09:07,039 --> 00:09:13,610

thinkers should be familiar with these

224

00:09:10,600 --> 00:09:16,129

logical fallacies in order if nothing

225

00:09:13,610 --> 00:09:19,580

else in order that we don't commit them

226

00:09:16,129 --> 00:09:21,679

ourselves absolutely yeah and and not

227

00:09:19,580 --> 00:09:23,420

that's certainly one major thing and

228

00:09:21,679 --> 00:09:26,299

that's what we said an introduction to

229

00:09:23,419 --> 00:09:28,099

the book is that you know one of the

230

00:09:26,299 --> 00:09:30,259

things about constructing an argument

231

00:09:28,100 --> 00:09:32,210

now there's those books on how to

232

00:09:30,259 --> 00:09:34,399

construct name or we week went the other

233

00:09:32,210 --> 00:09:36,110

way we thought well if you learn how to

234

00:09:34,399 --> 00:09:38,090

get rid of the bad point of an argument

235

00:09:36,110 --> 00:09:40,490

kind of by default you're only left with

236

00:09:38,090 --> 00:09:42,920

the good ones so that's a bit of a

237

00:09:40,490 --> 00:09:44,990

shortcut to making sure an argument that

238

00:09:42,919 --> 00:09:46,459

you're constructing is is valid one of

239

00:09:44,990 --> 00:09:49,399

course you can use it for devious ends

240

00:09:46,460 --> 00:09:51,530

to done deliberately employ them for

241

00:09:49,399 --> 00:09:53,629

your own benefit but you know at the end

242

00:09:51,529 --> 00:09:54,919

of the day even if you're just aware of

243  
00:09:53,629 --> 00:09:56,389  
their there are these things called

244  
00:09:54,919 --> 00:09:58,039  
fallacies out there because a lot of

245  
00:09:56,389 --> 00:10:00,169  
people you talk to them they don't even

246  
00:09:58,039 --> 00:10:00,699  
realize there's things you can you can

247  
00:10:00,169 --> 00:10:03,039  
make a

248  
00:10:00,700 --> 00:10:04,600  
document that is gonna go I have a gut

249  
00:10:03,039 --> 00:10:06,159  
feeling that someone's telling them

250  
00:10:04,600 --> 00:10:08,080  
rubbish but they don't really understand

251  
00:10:06,159 --> 00:10:09,969  
that you can construct an argument based

252  
00:10:08,080 --> 00:10:13,180  
on premises and have a conclusion and

253  
00:10:09,970 --> 00:10:14,680  
things like that so it's it's I suppose

254  
00:10:13,179 --> 00:10:16,419  
it's just like a language another

255  
00:10:14,679 --> 00:10:19,239  
language to speak and adds another tool

256  
00:10:16,419 --> 00:10:20,849  
to your intellectual toolkit I guess if

257

00:10:19,240 --> 00:10:24,759  
you if you're aware of these fallacies

258  
00:10:20,850 --> 00:10:27,460  
and just the general idea of trying

259  
00:10:24,759 --> 00:10:30,370  
to put links together to make an

260  
00:10:27,460 --> 00:10:33,040  
argument make sense and since listening

261  
00:10:30,370 --> 00:10:35,139  
to your podcast and reading your book it

262  
00:10:33,039 --> 00:10:38,529  
is difficult i will have to admit it is

263  
00:10:35,139 --> 00:10:40,029  
difficult to keep all these in mind when

264  
00:10:38,529 --> 00:10:41,649  
you're talking to somebody and quite

265  
00:10:40,029 --> 00:10:43,360  
often someone will make a logical

266  
00:10:41,649 --> 00:10:45,159  
fallacy although employ something like

267  
00:10:43,360 --> 00:10:46,480  
the browbeating which you explain in

268  
00:10:45,159 --> 00:10:49,929  
your book or whatever the case may be

269  
00:10:46,480 --> 00:10:51,779  
and quite often it's very hard to catch

270  
00:10:49,929 --> 00:10:53,889  
it as it happens because you absolutely

271  
00:10:51,779 --> 00:10:55,509

concentrating on the on the conversation

272

00:10:53,889 --> 00:10:57,279

or the argument you're trying to think

273

00:10:55,509 --> 00:10:59,470

of your point of view and suddenly

274

00:10:57,279 --> 00:11:02,230

they'll sneak in even without knowing it

275

00:10:59,470 --> 00:11:03,279

some outrageous logical fallacy and yes

276

00:11:02,230 --> 00:11:05,620

they can go right over your head

277

00:11:03,279 --> 00:11:07,600

sometimes yeah I'm and that's the thing

278

00:11:05,620 --> 00:11:10,570

is to not get hung up on it on the in

279

00:11:07,600 --> 00:11:12,700

the actual point in time and also to be

280

00:11:10,570 --> 00:11:14,200

happy to say something look I've taken

281

00:11:12,700 --> 00:11:15,820

on what you're saying but I really can't

282

00:11:14,200 --> 00:11:17,100

respond to at this point I need a bit of

283

00:11:15,820 --> 00:11:19,870

time to think about what you're saying

284

00:11:17,100 --> 00:11:22,200

because in the heat of an argument you

285

00:11:19,870 --> 00:11:24,519

know people don't often think to do that

286  
00:11:22,200 --> 00:11:26,560  
but also yeah i mean really don't get

287  
00:11:24,519 --> 00:11:28,120  
hung up on the terms so much just just

288  
00:11:26,559 --> 00:11:30,399  
try and think about why what did they

289  
00:11:28,120 --> 00:11:33,159  
say that didn't make much sense can i

290  
00:11:30,399 --> 00:11:34,449  
dissect it probably the main thing when

291  
00:11:33,159 --> 00:11:37,389  
you're actually discussing something

292  
00:11:34,450 --> 00:11:38,410  
with someone in real time the number one

293  
00:11:37,389 --> 00:11:40,480  
thing I've noticed especially when I

294  
00:11:38,409 --> 00:11:42,159  
listen to you know debates between

295  
00:11:40,480 --> 00:11:43,680  
prominent thinkers let like you know

296  
00:11:42,159 --> 00:11:46,839  
Richard Dawkins and somebody or what

297  
00:11:43,679 --> 00:11:49,899  
they really let them go off topic

298  
00:11:46,840 --> 00:11:50,980  
straight away and so that's probably

299  
00:11:49,899 --> 00:11:52,750  
that's what you know moving the

300  
00:11:50,980 --> 00:11:54,039  
goalposts and that's will be the main

301  
00:11:52,750 --> 00:11:55,419  
tactic people you so that's really

302  
00:11:54,039 --> 00:11:57,370  
important it's just say no this was a

303  
00:11:55,419 --> 00:11:58,929  
point we're addressing you have an

304  
00:11:57,370 --> 00:12:00,879  
answer that yet stay on it so you know

305  
00:11:58,929 --> 00:12:03,069  
good journals journals will do that with

306  
00:12:00,879 --> 00:12:04,809  
politicians you know how try to do if

307  
00:12:03,070 --> 00:12:06,610  
they try to do a politician not although

308  
00:12:04,809 --> 00:12:07,689  
they'll admit defeat they'll go okay

309  
00:12:06,610 --> 00:12:09,129  
you're not going to answer that but at

310  
00:12:07,690 --> 00:12:11,740  
least they've said you haven't answered

311  
00:12:09,129 --> 00:12:12,700  
that whereas the slippery people the one

312  
00:12:11,740 --> 00:12:14,389  
so you just shift the conversation

313  
00:12:12,700 --> 00:12:15,650  
slowly and you don't

314

00:12:14,389 --> 00:12:17,960  
lies that you've actually moved off

315  
00:12:15,649 --> 00:12:20,209  
topic so there's some little tactics but

316  
00:12:17,960 --> 00:12:22,759  
again when I wrote the book for example

317  
00:12:20,210 --> 00:12:25,820  
I wasn't as good at it as good at it as

318  
00:12:22,759 --> 00:12:28,100  
I am now and that's just because by

319  
00:12:25,820 --> 00:12:30,080  
doing a website and practicing it and

320  
00:12:28,100 --> 00:12:31,610  
looking at it and doing it over time you

321  
00:12:30,080 --> 00:12:35,090  
just get better you know you hope you

322  
00:12:31,610 --> 00:12:36,529  
get better anyway so yeah I people don't

323  
00:12:35,090 --> 00:12:38,450  
you know don't stress over just think

324  
00:12:36,529 --> 00:12:40,399  
it's an ongoing thing you know lifelong

325  
00:12:38,450 --> 00:12:41,930  
learning all that kind of stuff you're

326  
00:12:40,399 --> 00:12:43,610  
the sort of person i wish i had by my

327  
00:12:41,929 --> 00:12:45,139  
side when I was filming the the

328  
00:12:43,610 --> 00:12:47,149

television show the one last year

329

00:12:45,139 --> 00:12:49,819

because I was hearing an awful lot of

330

00:12:47,149 --> 00:12:52,309

interesting arguments so to speak and I

331

00:12:49,820 --> 00:12:53,870

know there was logical fallacies being

332

00:12:52,309 --> 00:12:56,209

thrown left right and center but it is

333

00:12:53,870 --> 00:12:58,970

very difficult to keep up yeah actually

334

00:12:56,210 --> 00:13:00,320

why I you know cuz i watch the one and I

335

00:12:58,970 --> 00:13:02,269

thought I you're a rock and a hard place

336

00:13:00,320 --> 00:13:04,460

because you did the exact right thing

337

00:13:02,269 --> 00:13:07,460

which is what again if you read any

338

00:13:04,460 --> 00:13:10,070

research on debates the point people

339

00:13:07,460 --> 00:13:12,560

make our irrelevant it's how likable you

340

00:13:10,070 --> 00:13:14,120

are yes I on that sense you watch if

341

00:13:12,559 --> 00:13:16,069

what you do you did very well because

342

00:13:14,120 --> 00:13:17,539

people don't they don't care that they

343  
00:13:16,070 --> 00:13:20,150  
just like the look of you and what you

344  
00:13:17,539 --> 00:13:21,529  
sound like it's sad but that's just

345  
00:13:20,149 --> 00:13:23,720  
that's one side sad that's just how

346  
00:13:21,529 --> 00:13:25,610  
humans are all right with you easier to

347  
00:13:23,720 --> 00:13:27,560  
your advantage here good me it's very

348  
00:13:25,610 --> 00:13:30,590  
sad look well I've got you there there's

349  
00:13:27,559 --> 00:13:34,359  
one that comes I find comes up quite a

350  
00:13:30,590 --> 00:13:37,580  
lot and since simply what I mean is

351  
00:13:34,360 --> 00:13:39,230  
especially recently we've been arguing a

352  
00:13:37,580 --> 00:13:41,480  
lot with people who believe that you

353  
00:13:39,230 --> 00:13:43,310  
shouldn't vaccinate babies for example

354  
00:13:41,480 --> 00:13:45,800  
yeah this is a big big issue at the

355  
00:13:43,309 --> 00:13:48,949  
moment and quite often they will throw

356  
00:13:45,799 --> 00:13:50,809  
up which is listed in your book here the

357  
00:13:48,950 --> 00:13:52,910  
earlier version i have is floor number

358  
00:13:50,809 --> 00:13:54,349  
eight the false dichotomy could you

359  
00:13:52,909 --> 00:13:56,000  
spend really explaining that one because

360  
00:13:54,350 --> 00:13:58,820  
i think that's a very important issue

361  
00:13:56,000 --> 00:14:01,970  
yeah i mean the false dichotomy or false

362  
00:13:58,820 --> 00:14:03,950  
dilemma is one people use all the time

363  
00:14:01,970 --> 00:14:05,840  
and basically it's either it's black or

364  
00:14:03,950 --> 00:14:07,370  
white reasoning so either you do this

365  
00:14:05,840 --> 00:14:10,700  
one thing or you don't do this other

366  
00:14:07,370 --> 00:14:12,500  
thing and and so they split things up

367  
00:14:10,700 --> 00:14:14,120  
where well why can't we go in the middle

368  
00:14:12,500 --> 00:14:17,299  
you know what why isn't then is so your

369  
00:14:14,120 --> 00:14:20,720  
middle decision to make or is there a

370  
00:14:17,299 --> 00:14:22,809  
third option so and it's very often it's

371

00:14:20,720 --> 00:14:25,610  
just deliberately done it's a tactic

372  
00:14:22,809 --> 00:14:27,719  
unconsciously often but a good example i

373  
00:14:25,610 --> 00:14:29,310  
can think of

374  
00:14:27,720 --> 00:14:30,810  
because we did a podcast in this one so

375  
00:14:29,309 --> 00:14:32,929  
these are the examples of top of my head

376  
00:14:30,809 --> 00:14:34,979  
but you know the Large Hadron Collider

377  
00:14:32,929 --> 00:14:37,679  
though all these people that came out on

378  
00:14:34,980 --> 00:14:39,028  
a spending 20 billion dollars on this

379  
00:14:37,679 --> 00:14:40,679  
thing you know it's 20 billion dollars

380  
00:14:39,028 --> 00:14:43,169  
over ten years why aren't they spending

381  
00:14:40,679 --> 00:14:46,138  
it on x y&z it's like why can't they

382  
00:14:43,169 --> 00:14:48,240  
spend on this end on XY and Z so unless

383  
00:14:46,139 --> 00:14:50,100  
you tell me why we can't do one or the

384  
00:14:48,240 --> 00:14:52,100  
other why we can't do them both then

385  
00:14:50,100 --> 00:14:56,040

you're creating a false dichotomy and

386

00:14:52,100 --> 00:14:58,079

the anti-vaxxers their classic one they

387

00:14:56,039 --> 00:15:01,318

kind of do is something like it's a

388

00:14:58,078 --> 00:15:03,628

choice between either immunizing your

389

00:15:01,318 --> 00:15:06,559

yours child which will then give them

390

00:15:03,629 --> 00:15:08,909

autism which is you know rubbish yeah or

391

00:15:06,559 --> 00:15:11,159

doing it some alternative way like

392

00:15:08,909 --> 00:15:12,899

exposing your children to measles when

393

00:15:11,159 --> 00:15:15,059

there's a measles outbreak around and

394

00:15:12,899 --> 00:15:18,208

it's like well first of all you're

395

00:15:15,059 --> 00:15:20,278

creating this false dilemma where you're

396

00:15:18,208 --> 00:15:22,018

actually basing it on a factoid that's

397

00:15:20,278 --> 00:15:23,759

incorrect you're basically on something

398

00:15:22,019 --> 00:15:27,509

that's been demonstrated in the

399

00:15:23,759 --> 00:15:28,680

literature over time to be incorrect the

400  
00:15:27,509 --> 00:15:30,839  
other one they're really good at doing

401  
00:15:28,679 --> 00:15:32,909  
and this is one we've already done the

402  
00:15:30,839 --> 00:15:34,199  
podcast and this one but I'm doing it

403  
00:15:32,909 --> 00:15:37,769  
again on talk about this one which is

404  
00:15:34,198 --> 00:15:39,929  
they stack the deck so by stacking the

405  
00:15:37,769 --> 00:15:42,000  
deck is they don't they should they give

406  
00:15:39,929 --> 00:15:43,620  
put the cards in an order that means

407  
00:15:42,000 --> 00:15:46,230  
that their argument looks strong and by

408  
00:15:43,620 --> 00:15:48,299  
what they actually do is all they ever

409  
00:15:46,230 --> 00:15:50,370  
talk about with autism is the supposed

410  
00:15:48,299 --> 00:15:53,278  
link with vaccines they never mention

411  
00:15:50,370 --> 00:15:55,589  
any of the actual research being on done

412  
00:15:53,278 --> 00:15:57,179  
on autism and you know when this started

413  
00:15:55,589 --> 00:15:58,500  
happening I thought or go and have a

414  
00:15:57,179 --> 00:16:00,688  
look at some of the actual things about

415  
00:15:58,500 --> 00:16:02,578  
autism what's going on and there's so

416  
00:16:00,688 --> 00:16:04,438  
much evidence out there about the actual

417  
00:16:02,578 --> 00:16:06,448  
cause about the genetic causes of it

418  
00:16:04,438 --> 00:16:07,818  
things like that about some studies that

419  
00:16:06,448 --> 00:16:10,789  
now done where they can even identify

420  
00:16:07,818 --> 00:16:13,318  
with about eighty percent accuracy of

421  
00:16:10,789 --> 00:16:16,139  
children's behavior at the age of six

422  
00:16:13,318 --> 00:16:17,490  
months by their lack of eye contact and

423  
00:16:16,139 --> 00:16:19,079  
whether they've got autism or not now

424  
00:16:17,490 --> 00:16:22,019  
they're not getting the MMR vaccine into

425  
00:16:19,078 --> 00:16:23,878  
what two years old so you know there's

426  
00:16:22,019 --> 00:16:25,259  
so much evidence but they never talk

427  
00:16:23,879 --> 00:16:27,839  
about that so if you go to some of the

428

00:16:25,259 --> 00:16:30,269  
big autism vaccine blogs and you search

429  
00:16:27,839 --> 00:16:32,100  
for those things they're never there so

430  
00:16:30,269 --> 00:16:33,899  
that's a classic one just ignore any

431  
00:16:32,100 --> 00:16:37,170  
counter evidence and just focus on your

432  
00:16:33,899 --> 00:16:39,480  
particular um you know thing you're into

433  
00:16:37,169 --> 00:16:40,990  
so in this case hating softer says look

434  
00:16:39,480 --> 00:16:42,879  
as the case may be

435  
00:16:40,990 --> 00:16:45,009  
it's it's interesting to another thing

436  
00:16:42,879 --> 00:16:47,049  
that comes up and I wonder if this is

437  
00:16:45,009 --> 00:16:48,730  
sort of associated with it and again

438  
00:16:47,049 --> 00:16:52,028  
it's showing my ignorance here trying to

439  
00:16:48,730 --> 00:16:54,820  
to keep all these fallacies in mind is

440  
00:16:52,028 --> 00:16:57,070  
where they'll bring up the concept of

441  
00:16:54,820 --> 00:17:00,160  
balance let's let's take the

442  
00:16:57,070 --> 00:17:01,570

anti-vaxxers again so there's this the

443

00:17:00,159 --> 00:17:03,789

the line that we should vaccinate our

444

00:17:01,570 --> 00:17:06,759

kids to prevent these these diseases etc

445

00:17:03,789 --> 00:17:08,709

and I'll say oh yes but we want balance

446

00:17:06,759 --> 00:17:11,379

we want the other side of the story

447

00:17:08,709 --> 00:17:14,529

shown now as you and I both know there

448

00:17:11,380 --> 00:17:15,819

is no other side way that is insane we

449

00:17:14,529 --> 00:17:16,838

haven't done the podcast on that one but

450

00:17:15,818 --> 00:17:19,720

I probably is that'll be false

451

00:17:16,838 --> 00:17:21,759

compromise so false my compromise where

452

00:17:19,720 --> 00:17:23,439

you're making us compromise between so a

453

00:17:21,759 --> 00:17:25,299

journalist might make a false compromise

454

00:17:23,439 --> 00:17:29,320

and say oh let's do both sides and treat

455

00:17:25,299 --> 00:17:32,109

them equally now balance means about you

456

00:17:29,319 --> 00:17:33,579

are fair in your investigation of what's

457  
00:17:32,109 --> 00:17:35,379  
going on and you're balancing your

458  
00:17:33,579 --> 00:17:37,449  
investigation that doesn't mean you

459  
00:17:35,380 --> 00:17:39,150  
present to unequal side that's going to

460  
00:17:37,450 --> 00:17:42,160  
be you know if you have any debate about

461  
00:17:39,150 --> 00:17:43,450  
whether the earth is you know how all

462  
00:17:42,160 --> 00:17:45,279  
the earth is you're not going to bother

463  
00:17:43,450 --> 00:17:47,769  
inviting a young earth creationist there

464  
00:17:45,279 --> 00:17:49,899  
because we know the evidence says

465  
00:17:47,769 --> 00:17:51,339  
they're completely and utterly wrong so

466  
00:17:49,900 --> 00:17:52,690  
why would you do the same the fact the

467  
00:17:51,339 --> 00:17:54,308  
anti-vaxxers the any reason is good as

468  
00:17:52,690 --> 00:17:56,650  
interesting controversy that's the only

469  
00:17:54,308 --> 00:17:59,200  
reason journalists do it yeah there's no

470  
00:17:56,650 --> 00:18:00,820  
I mean and and the other one they do of

471  
00:17:59,200 --> 00:18:03,519  
course is bad faith and being completely

472  
00:18:00,819 --> 00:18:04,808  
disingenuous so on that channel 7 thing

473  
00:18:03,519 --> 00:18:07,179  
that we had recently that you guys went

474  
00:18:04,808 --> 00:18:10,750  
to you know the doctor that got up there

475  
00:18:07,179 --> 00:18:12,880  
and she said I'm not anti vaccines but

476  
00:18:10,750 --> 00:18:14,890  
I'm pro-choice but if I hang on have you

477  
00:18:12,880 --> 00:18:17,920  
ever given a vaccine so if someone came

478  
00:18:14,890 --> 00:18:21,130  
into your your practice and said I want

479  
00:18:17,920 --> 00:18:23,170  
a vaccination would she do it no so

480  
00:18:21,130 --> 00:18:25,540  
completely disingenuous in the way she

481  
00:18:23,170 --> 00:18:27,220  
acts as well so if you're pro-choice you

482  
00:18:25,539 --> 00:18:28,569  
would you would allow you would you

483  
00:18:27,220 --> 00:18:31,390  
would you would give some the vaccine if

484  
00:18:28,569 --> 00:18:33,789  
they wanted it so you know it they're

485

00:18:31,390 --> 00:18:36,610  
very disingenuous and the way they argue

486  
00:18:33,789 --> 00:18:39,099  
as well so it's good it's good to know

487  
00:18:36,609 --> 00:18:40,808  
and it's again for any skeptic out there

488  
00:18:39,099 --> 00:18:43,149  
who's especially getting into this field

489  
00:18:40,808 --> 00:18:45,819  
or the season skeptic I can silly

490  
00:18:43,150 --> 00:18:48,250  
sincerely recommend you value yourself

491  
00:18:45,819 --> 00:18:50,409  
of this great information now the

492  
00:18:48,250 --> 00:18:52,359  
podcast how can people hear your podcast

493  
00:18:50,410 --> 00:18:53,980  
well the best way to see all the stuff

494  
00:18:52,359 --> 00:18:54,649  
is just together well if you're good

495  
00:18:53,980 --> 00:18:56,480  
you're mine

496  
00:18:54,650 --> 00:18:59,210  
Theo Clark I'm actually the number one

497  
00:18:56,480 --> 00:19:00,680  
goofy o'clock on Google possibly because

498  
00:18:59,210 --> 00:19:04,370  
of my first name gives me an unfair

499  
00:19:00,680 --> 00:19:06,890

advantage but yeah the ww skeptics field

500

00:19:04,369 --> 00:19:08,509

guide or one word net and that skeptics

501

00:19:06,890 --> 00:19:10,640

with a capital K because I like the look

502

00:19:08,509 --> 00:19:12,049

of it better to ya even though in

503

00:19:10,640 --> 00:19:15,290

Australia technically women's built the

504

00:19:12,049 --> 00:19:17,000

sea yeah and that's where you can go to

505

00:19:15,289 --> 00:19:19,369

have a look and then it's pretty obvious

506

00:19:17,000 --> 00:19:21,410

from there there's links everywhere the

507

00:19:19,369 --> 00:19:24,349

ebooks down the bottom of the page as a

508

00:19:21,410 --> 00:19:26,029

PDF it's on scribed com so you can get

509

00:19:24,349 --> 00:19:27,529

it from there as well and download it

510

00:19:26,029 --> 00:19:31,099

and print it off and bind it or whatever

511

00:19:27,529 --> 00:19:32,720

you want to do we're also selling the

512

00:19:31,099 --> 00:19:33,949

actual paperback for twenty dollars

513

00:19:32,720 --> 00:19:36,319

Australian and there's a link there on

514  
00:19:33,950 --> 00:19:38,240  
the website for that as well even posted

515  
00:19:36,319 --> 00:19:39,710  
overseas that will cost you a little bit

516  
00:19:38,240 --> 00:19:41,569  
more of the postage but Australian

517  
00:19:39,710 --> 00:19:44,000  
dollars so weak anyway fee yeah the

518  
00:19:41,569 --> 00:19:46,159  
American listeners out there no problems

519  
00:19:44,000 --> 00:19:47,690  
for you guys to buy it yeah so that

520  
00:19:46,160 --> 00:19:49,810  
that's the other option to as well and

521  
00:19:47,690 --> 00:19:53,299  
yeah all it's all there on the website

522  
00:19:49,809 --> 00:19:55,429  
and there before I go Richard in before

523  
00:19:53,299 --> 00:19:58,399  
we end this I have a little plug I want

524  
00:19:55,430 --> 00:20:00,920  
to do to all Australians out there in my

525  
00:19:58,400 --> 00:20:03,080  
job which is as a science curriculum or

526  
00:20:00,920 --> 00:20:04,730  
a writer in queensland and i get i get

527  
00:20:03,079 --> 00:20:06,439  
to enjoy looking at the science

528  
00:20:04,730 --> 00:20:08,779  
curriculum and so on which is obviously

529  
00:20:06,440 --> 00:20:11,390  
the skeptics were pretty concerned about

530  
00:20:08,779 --> 00:20:14,690  
and the moment australia is writing a

531  
00:20:11,390 --> 00:20:16,310  
national curriculum and there at the

532  
00:20:14,690 --> 00:20:18,080  
moment they're writing it and they'll

533  
00:20:16,309 --> 00:20:21,230  
the draft versions of the curriculum

534  
00:20:18,079 --> 00:20:23,389  
will be out at the beginning of 2010 so

535  
00:20:21,230 --> 00:20:26,779  
i encourage all skeptics australian

536  
00:20:23,390 --> 00:20:28,730  
skeptics to get on the website for the

537  
00:20:26,779 --> 00:20:31,519  
Australian Curriculum and reporting

538  
00:20:28,730 --> 00:20:33,049  
authority and when those drafts come out

539  
00:20:31,519 --> 00:20:34,549  
make sure you read them and give them

540  
00:20:33,049 --> 00:20:36,049  
some feedback some positive feedback

541  
00:20:34,549 --> 00:20:38,000  
about the good things they're doing in

542

00:20:36,049 --> 00:20:40,490  
questions on the dodgy things because

543  
00:20:38,000 --> 00:20:42,500  
they specifically say in the aims of the

544  
00:20:40,490 --> 00:20:45,410  
australian science curriculum the words

545  
00:20:42,500 --> 00:20:47,000  
skepticism is there and then they

546  
00:20:45,410 --> 00:20:49,070  
actually say students should be able to

547  
00:20:47,000 --> 00:20:50,390  
engage in communication of in about

548  
00:20:49,069 --> 00:20:52,849  
science and value evidence and

549  
00:20:50,390 --> 00:20:55,670  
skepticism and question scientific

550  
00:20:52,849 --> 00:20:57,139  
claims made by others so i think there's

551  
00:20:55,670 --> 00:20:59,539  
an opportunity there for skeptics to

552  
00:20:57,140 --> 00:21:01,520  
really try and push that word to be in

553  
00:20:59,539 --> 00:21:03,220  
the curriculum and to really say it's a

554  
00:21:01,519 --> 00:21:05,629  
good positive word out there because

555  
00:21:03,220 --> 00:21:07,819  
again as we know that word is often

556  
00:21:05,630 --> 00:21:08,470

confused with cynicism and if we can

557

00:21:07,819 --> 00:21:10,720

actually get

558

00:21:08,470 --> 00:21:12,940

language into our science curriculum and

559

00:21:10,720 --> 00:21:14,950

have that being a term that's used and

560

00:21:12,940 --> 00:21:17,048

talked about in science classrooms

561

00:21:14,950 --> 00:21:18,159

because support unsurprisingly I suppose

562

00:21:17,048 --> 00:21:20,679

a lot of science teachers aren't

563

00:21:18,159 --> 00:21:22,480

particularly skeptical going to be

564

00:21:20,679 --> 00:21:24,000

fantastic if we get that an Australian

565

00:21:22,480 --> 00:21:25,929

Curriculum so I really encourage

566

00:21:24,000 --> 00:21:31,089

everyone to go to the Australian

567

00:21:25,929 --> 00:21:34,750

Curriculum website that's WWE called you

568

00:21:31,089 --> 00:21:36,009

a you so takara and when their drafts

569

00:21:34,750 --> 00:21:37,179

come out get on there have a look at

570

00:21:36,009 --> 00:21:38,890

them and give them some positive

571  
00:21:37,179 --> 00:21:41,230  
feedback about that word skepticism

572  
00:21:38,890 --> 00:21:42,850  
great idea absolutely i encourage

573  
00:21:41,230 --> 00:21:44,829  
everybody to do that and i also

574  
00:21:42,849 --> 00:21:48,969  
encourage everybody to grab a copy of

575  
00:21:44,829 --> 00:21:50,949  
humbug the skeptics guide to spotting

576  
00:21:48,970 --> 00:21:52,990  
fallacies in thinking listen to the

577  
00:21:50,950 --> 00:21:55,390  
podcast because each podcast breaks down

578  
00:21:52,990 --> 00:21:57,009  
a different fallacy and how many of you

579  
00:21:55,390 --> 00:22:00,700  
got up there by now must be a big number

580  
00:21:57,009 --> 00:22:01,900  
we're on I saw that you were working on

581  
00:22:00,700 --> 00:22:03,940  
the zone and I've been working on my

582  
00:22:01,900 --> 00:22:07,090  
podcast and be number 29 going out we're

583  
00:22:03,940 --> 00:22:08,679  
getting a bit slack at home trying to

584  
00:22:07,089 --> 00:22:12,069  
get them up but we're doing about once

585  
00:22:08,679 --> 00:22:15,159  
every fortnight and I'm trying to

586  
00:22:12,069 --> 00:22:16,689  
hopefully get them all done before the

587  
00:22:15,159 --> 00:22:19,260  
end of August because that's when I'm

588  
00:22:16,690 --> 00:22:21,850  
expecting another child and so I don't

589  
00:22:19,259 --> 00:22:24,640  
be worried about my output after that

590  
00:22:21,849 --> 00:22:25,869  
point but yeah so we're doing about once

591  
00:22:24,640 --> 00:22:29,110  
every fortnight at the moment and we're

592  
00:22:25,869 --> 00:22:32,109  
up to 29 so I imagine we'll get up in

593  
00:22:29,109 --> 00:22:33,849  
the high 30s at least before we run out

594  
00:22:32,109 --> 00:22:35,259  
of fallacies to talk about and then we

595  
00:22:33,849 --> 00:22:37,119  
might just pick out some random ones

596  
00:22:35,259 --> 00:22:38,619  
here and there to look at that's

597  
00:22:37,119 --> 00:22:40,719  
excellent of course it's not only a

598  
00:22:38,619 --> 00:22:42,189  
discussion about the fallacies you do

599

00:22:40,720 --> 00:22:44,319  
other things in your podcast to I

600  
00:22:42,190 --> 00:22:46,538  
remember there was a memorable memorable

601  
00:22:44,319 --> 00:22:48,399  
time where you were talking to a psychic

602  
00:22:46,538 --> 00:22:50,109  
oh you want to see yeah yeah yep yep

603  
00:22:48,400 --> 00:22:51,759  
yeah and we've got a we've got another

604  
00:22:50,109 --> 00:22:54,158  
one up in a similar vein it's not

605  
00:22:51,759 --> 00:22:55,450  
specifically about a fallacy we're going

606  
00:22:54,159 --> 00:22:56,770  
to sit down with a couple of skeptical

607  
00:22:55,450 --> 00:22:58,779  
people I know we're going to come up

608  
00:22:56,769 --> 00:23:01,599  
with a list of all the things we've

609  
00:22:58,779 --> 00:23:02,889  
changed our mind about because one of

610  
00:23:01,599 --> 00:23:04,689  
the things you get as a skeptic of

611  
00:23:02,890 --> 00:23:05,620  
course is all your clothes minded you

612  
00:23:04,690 --> 00:23:08,200  
wouldn't change your mind about anything

613  
00:23:05,619 --> 00:23:09,579

and it's really annoying because it's

614

00:23:08,200 --> 00:23:11,679

one of those ones where when I walk away

615

00:23:09,579 --> 00:23:13,149

as you're saying before you haven't

616

00:23:11,679 --> 00:23:15,038

thought about these things and you don't

617

00:23:13,150 --> 00:23:16,570

have an answer on the spot and I walk

618

00:23:15,038 --> 00:23:18,669

waiting SI haven't changed my mind about

619

00:23:16,569 --> 00:23:21,750

this this and that but it's too late so

620

00:23:18,669 --> 00:23:24,390

that if I come up with a list good to go

621

00:23:21,750 --> 00:23:25,559

sorry I'm gonna do when we're gonna sit

622

00:23:24,390 --> 00:23:27,300

down and work out some things I changed

623

00:23:25,559 --> 00:23:30,809

my was wrong once I remember having back

624

00:23:27,299 --> 00:23:32,460

in nineteen eighty yes nice that's a

625

00:23:30,809 --> 00:23:33,990

planner I'll encourage all skeptics to

626

00:23:32,460 --> 00:23:35,370

come up with at least say if you're good

627

00:23:33,990 --> 00:23:37,289

to go when some of the keys you've been

628  
00:23:35,369 --> 00:23:39,719  
closed-minded an excellent idea now I

629  
00:23:37,289 --> 00:23:42,509  
hope I will see you in Brisbane in

630  
00:23:39,720 --> 00:23:43,819  
November for the ECHL invention yep

631  
00:23:42,509 --> 00:23:46,980  
absolutely i'm looking forward to that

632  
00:23:43,819 --> 00:23:49,169  
excellent well look thanks Theo keep up

633  
00:23:46,980 --> 00:23:51,089  
your excellent podcast I do enjoy

634  
00:23:49,170 --> 00:23:53,310  
listening to it I try to remember as

635  
00:23:51,089 --> 00:23:54,869  
much as possible and my regards to your

636  
00:23:53,309 --> 00:23:57,929  
dad Jeff who helps you out on the

637  
00:23:54,869 --> 00:23:59,609  
podcast of course and I just can I just

638  
00:23:57,930 --> 00:24:01,350  
reaffirm everything you say about me

639  
00:23:59,609 --> 00:24:03,959  
right back at you Richard fantastic

640  
00:24:01,349 --> 00:24:06,299  
thank you and thank you for being our

641  
00:24:03,960 --> 00:24:08,480  
guest today on the skeptic zone thank

642  
00:24:06,299 --> 00:24:08,480  
you

643  
00:24:14,440 --> 00:24:22,309  
help re-establish the herd immunity of

644  
00:24:18,279 --> 00:24:24,410  
Nevada tam seven is fast approaching and

645  
00:24:22,309 --> 00:24:26,000  
those of you who have already signed up

646  
00:24:24,410 --> 00:24:27,710  
may have noticed something a bit

647  
00:24:26,000 --> 00:24:30,589  
different about the bottom of the

648  
00:24:27,710 --> 00:24:33,200  
registration page this year the James

649  
00:24:30,589 --> 00:24:35,240  
Randi Educational Foundation is working

650  
00:24:33,200 --> 00:24:39,140  
with the Southern Nevada Health District

651  
00:24:35,240 --> 00:24:42,440  
as in HD to provide vaccinations for

652  
00:24:39,140 --> 00:24:51,290  
children in Nevada to help support this

653  
00:24:42,440 --> 00:24:54,350  
worthy cause please visit WWE so that's

654  
00:24:51,289 --> 00:24:56,539  
why you can't eat her okay I was just

655  
00:24:54,349 --> 00:24:57,859  
talking to the students here now look

656

00:24:56,539 --> 00:25:00,680  
I'm supposed to tell you about something

657  
00:24:57,859 --> 00:25:04,250  
the cosmic tea party a new science

658  
00:25:00,680 --> 00:25:05,890  
podcast podcast the hose it at any rate

659  
00:25:04,250 --> 00:25:08,660  
it's about science and mathematics

660  
00:25:05,890 --> 00:25:11,720  
sounds rather dull oh hang on I open it

661  
00:25:08,660 --> 00:25:14,540  
and says here not done so there you have

662  
00:25:11,720 --> 00:25:17,509  
it the cosmic tea party podcast ww

663  
00:25:14,539 --> 00:25:19,750  
cosmic Tea Party or or search for them

664  
00:25:17,509 --> 00:25:19,750  
on itunes

665  
00:25:26,859 --> 00:25:32,808  
all right now this next segment is

666  
00:25:29,779 --> 00:25:35,678  
presented by our reporter Kylie Sturgis

667  
00:25:32,808 --> 00:25:39,319  
when she spoke last year at the perth

668  
00:25:35,679 --> 00:25:42,500  
atheists earth atheists try saying that

669  
00:25:39,319 --> 00:25:44,569  
three times quickly Perth is very much

670  
00:25:42,500 --> 00:25:46,759

on our mind at the moment because the

671

00:25:44,569 --> 00:25:50,029

University of Western Australia is

672

00:25:46,759 --> 00:25:52,429

hosting a secular week in August and dr.

673

00:25:50,029 --> 00:25:56,359

Richie dr. Rachel Dunlop and myself are

674

00:25:52,429 --> 00:26:00,530

planning on doing a talk at UWA atheists

675

00:25:56,359 --> 00:26:02,750

and agnostics society we are looking for

676

00:26:00,529 --> 00:26:06,859

help to get over to Perth and thanks to

677

00:26:02,750 --> 00:26:10,609

UWA atheists and agnostics society Perth

678

00:26:06,859 --> 00:26:13,159

atheists and wa humanist society we're

679

00:26:10,609 --> 00:26:15,168

brainstorming ideas if you'd like to

680

00:26:13,160 --> 00:26:17,600

help donate for flights to Perth or

681

00:26:15,169 --> 00:26:20,750

support the skeptic zone the paypal

682

00:26:17,599 --> 00:26:24,379

button is on our site at wwc a petting

683

00:26:20,750 --> 00:26:26,779

zoo TV in the meantime thanks very much

684

00:26:24,380 --> 00:26:29,419

to the Perth atheists for allowing us to

685  
00:26:26,779 --> 00:26:33,319  
use the audio from kylie's talk last

686  
00:26:29,419 --> 00:26:36,710  
year all about belief in weird things

687  
00:26:33,319 --> 00:26:39,548  
recent developments and educational

688  
00:26:36,710 --> 00:26:39,548  
directions

689  
00:26:44,579 --> 00:26:50,970  
my name is Kylie Sturgis but most of the

690  
00:26:48,148 --> 00:26:52,739  
time i'm known as Sturge a studio where

691  
00:26:50,970 --> 00:26:55,259  
you do it over there stage Oh have an

692  
00:26:52,740 --> 00:26:56,669  
ending my homework studio if the

693  
00:26:55,259 --> 00:26:59,038  
students have been particularly not

694  
00:26:56,669 --> 00:27:00,960  
annoying they call me Stewart which in

695  
00:26:59,038 --> 00:27:04,048  
my mind sort of comes across as of a

696  
00:27:00,960 --> 00:27:07,079  
disease a cow would get like um it died

697  
00:27:04,048 --> 00:27:09,089  
a brucellosis and stood so rotting away

698  
00:27:07,079 --> 00:27:10,619  
there so stir Joe's fine I've responded

699  
00:27:09,089 --> 00:27:13,168  
to that for about the last 10 years as a

700  
00:27:10,619 --> 00:27:14,939  
teacher the presentation i have is

701  
00:27:13,169 --> 00:27:16,350  
primarily about definitions for the

702  
00:27:14,940 --> 00:27:18,389  
first part and I've got a bit of reading

703  
00:27:16,349 --> 00:27:20,398  
to do but it does hold some ideas about

704  
00:27:18,388 --> 00:27:22,740  
possible strategies for atheists within

705  
00:27:20,398 --> 00:27:24,268  
their community although being skeptical

706  
00:27:22,740 --> 00:27:27,388  
is not something I think is necessary

707  
00:27:24,269 --> 00:27:29,399  
for an atheist to be I do think there is

708  
00:27:27,388 --> 00:27:31,558  
some common ground regarding what I have

709  
00:27:29,398 --> 00:27:32,788  
personally experienced in education that

710  
00:27:31,558 --> 00:27:35,158  
perhaps atheists can voice their

711  
00:27:32,788 --> 00:27:36,690  
opinions upon finally I would like to

712  
00:27:35,159 --> 00:27:39,659  
encourage those who are teachers other

713

00:27:36,690 --> 00:27:41,130  
any teachers you know cool even

714  
00:27:39,659 --> 00:27:43,590  
interested in education in one way or

715  
00:27:41,130 --> 00:27:45,990  
another about the future of our young in

716  
00:27:43,589 --> 00:27:47,699  
our community if you know teachers have

717  
00:27:45,990 --> 00:27:49,109  
a stake hold in the school like it might

718  
00:27:47,700 --> 00:27:52,110  
live near a school have the opportunity

719  
00:27:49,109 --> 00:27:53,668  
to view a school it's useful to have an

720  
00:27:52,109 --> 00:27:54,928  
interest in education today maybe have a

721  
00:27:53,669 --> 00:27:57,000  
say in what's going to happen next

722  
00:27:54,929 --> 00:28:00,350  
generation one of the first things that

723  
00:27:57,000 --> 00:28:03,319  
I usually do is say what is skepticism

724  
00:28:00,349 --> 00:28:06,808  
and skepticism is of course

725  
00:28:03,319 --> 00:28:09,480  
mean-spirited naysayers debunkers people

726  
00:28:06,808 --> 00:28:11,519  
who usually stay most of the time in the

727  
00:28:09,480 --> 00:28:12,419

kitchen at parties or worse they're

728

00:28:11,519 --> 00:28:14,638

behind the bar because they're the only

729

00:28:12,419 --> 00:28:16,049

sober ones and they make sure that the

730

00:28:14,638 --> 00:28:17,398

police come and get you when things get

731

00:28:16,048 --> 00:28:19,138

too rowdy just throw in the kitchen a

732

00:28:17,398 --> 00:28:21,629

party there you go you're you're

733

00:28:19,138 --> 00:28:24,089

skeptical person now this obviously

734

00:28:21,630 --> 00:28:25,860

isn't true but it is generally the sort

735

00:28:24,089 --> 00:28:28,678

of reputation that's people who are

736

00:28:25,859 --> 00:28:30,269

skeptically minded get I would point out

737

00:28:28,679 --> 00:28:33,059

that I don't normally go around calling

738

00:28:30,269 --> 00:28:34,470

myself a skeptic dr. Michael Sherman

739

00:28:33,058 --> 00:28:36,298

who's going to be chewing here soon who

740

00:28:34,470 --> 00:28:37,679

has a magazine called skeptic he doesn't

741

00:28:36,298 --> 00:28:40,609

often call himself a skeptic either

742  
00:28:37,679 --> 00:28:44,278  
because skepticism is about a process

743  
00:28:40,609 --> 00:28:46,589  
it's a label which often has negative

744  
00:28:44,278 --> 00:28:47,819  
connotations as I demonstrated and most

745  
00:28:46,589 --> 00:28:50,398  
of the time I just call myself an

746  
00:28:47,819 --> 00:28:52,319  
educator I'm female I'm a research

747  
00:28:50,398 --> 00:28:54,750  
assistant I'm a student of anomalistic

748  
00:28:52,319 --> 00:28:56,250  
psychology which I'll go into in a bit

749  
00:28:54,750 --> 00:28:58,589  
more detail later

750  
00:28:56,250 --> 00:29:00,960  
also study educational measurement of

751  
00:28:58,589 --> 00:29:03,240  
paranormal beliefs my experience and

752  
00:29:00,960 --> 00:29:05,670  
background 10 years as a teacher I have

753  
00:29:03,240 --> 00:29:07,259  
a Bachelor of Arts in English literature

754  
00:29:05,670 --> 00:29:09,750  
and philosophy I've deployment of

755  
00:29:07,259 --> 00:29:11,190  
education my first MF was in special

756  
00:29:09,750 --> 00:29:13,470  
learning needs education because of

757  
00:29:11,190 --> 00:29:16,289  
gifted and talented kids and my second

758  
00:29:13,470 --> 00:29:18,839  
Emmett is probably more tending towards

759  
00:29:16,289 --> 00:29:20,609  
educational psych since skepticism is

760  
00:29:18,839 --> 00:29:21,959  
something that's done it always seems a

761  
00:29:20,609 --> 00:29:24,269  
little bit weird to call myself a

762  
00:29:21,960 --> 00:29:26,490  
skeptic in one radio interview for

763  
00:29:24,269 --> 00:29:27,839  
example the radio interview just off the

764  
00:29:26,490 --> 00:29:29,279  
top of that his head said so what are

765  
00:29:27,839 --> 00:29:31,559  
you a critical thinker a skeptic and I

766  
00:29:29,279 --> 00:29:33,240  
said critical thinker if he gave me or

767  
00:29:31,559 --> 00:29:35,009  
more options I probably would have

768  
00:29:33,240 --> 00:29:36,180  
chosen more options but skeptic just

769  
00:29:35,009 --> 00:29:38,640  
didn't seem to come to mind which is

770

00:29:36,180 --> 00:29:40,950  
rather odd scepticism derives from the

771  
00:29:38,640 --> 00:29:42,690  
Greek its original meaning was inquiry

772  
00:29:40,950 --> 00:29:44,960  
and doubt which is a pretty good

773  
00:29:42,690 --> 00:29:48,059  
approximation of a definition it means

774  
00:29:44,960 --> 00:29:49,430  
engendering inquiry and down later

775  
00:29:48,059 --> 00:29:52,319  
philosophers used the word to mean

776  
00:29:49,430 --> 00:29:54,120  
philosophical doubt the notion of all

777  
00:29:52,319 --> 00:29:56,339  
pretense to knowledge is mere hubris

778  
00:29:54,119 --> 00:29:58,379  
attempting to ascertain that there is

779  
00:29:56,339 --> 00:29:59,490  
true reality in the world is incredibly

780  
00:29:58,380 --> 00:30:01,560  
arrogant in you can never know the

781  
00:29:59,490 --> 00:30:03,059  
reality of anything in other words we

782  
00:30:01,559 --> 00:30:06,240  
know nothing and can know nothing

783  
00:30:03,059 --> 00:30:09,269  
apparently piro one of the great fathers

784  
00:30:06,240 --> 00:30:11,819

of skepticism was very fond of walking

785

00:30:09,269 --> 00:30:12,960

off cliffs because he just denied that

786

00:30:11,819 --> 00:30:14,250

it was there and all his followers of

787

00:30:12,960 --> 00:30:17,150

trying to grab me but make sure you do

788

00:30:14,250 --> 00:30:19,380

it a lot in contemporary vernacular

789

00:30:17,150 --> 00:30:21,390

someone who is skeptical generally means

790

00:30:19,380 --> 00:30:23,670

someone who questions conventional

791

00:30:21,390 --> 00:30:26,340

wisdom someone who bitterly or

792

00:30:23,670 --> 00:30:28,590

excessively doubts it's often used as a

793

00:30:26,339 --> 00:30:30,000

pejorative means close-minded and it's

794

00:30:28,589 --> 00:30:32,429

the baggage that we just have to deal

795

00:30:30,000 --> 00:30:34,319

with essentially some more modern

796

00:30:32,430 --> 00:30:36,299

skeptical minded people like Richard

797

00:30:34,319 --> 00:30:37,740

Wiseman is trying they're trying to

798

00:30:36,299 --> 00:30:40,379

reinvent the word they come up with

799

00:30:37,740 --> 00:30:42,329

books like quirkology which look at a

800

00:30:40,380 --> 00:30:44,370

wide variety of quirky things in

801

00:30:42,329 --> 00:30:47,309

psychology and try to step away from the

802

00:30:44,369 --> 00:30:49,559

notion of skeptical together so what

803

00:30:47,309 --> 00:30:51,179

does skepticism involve skepticism

804

00:30:49,559 --> 00:30:52,950

involves favoring conclusions that are

805

00:30:51,180 --> 00:30:55,019

valid and consistently reliable rather

806

00:30:52,950 --> 00:30:57,330

than convenience sake you can probably

807

00:30:55,019 --> 00:30:59,430

all read it there that definition comes

808

00:30:57,329 --> 00:31:01,179

from dr. Steve novella who has a podcast

809

00:30:59,430 --> 00:31:04,269

and

810

00:31:01,180 --> 00:31:06,759

he also contributes quite regularly to a

811

00:31:04,269 --> 00:31:09,190

variety of magazines he contributes to

812

00:31:06,759 --> 00:31:11,170

his own blog called neurologica and is a

813  
00:31:09,190 --> 00:31:13,930  
member of quack watch he's primarily

814  
00:31:11,170 --> 00:31:15,550  
interested in investigating medical

815  
00:31:13,930 --> 00:31:18,490  
claims due to his background at Yale

816  
00:31:15,549 --> 00:31:20,019  
University scientific skepticism is an

817  
00:31:18,490 --> 00:31:21,910  
approach to knowledge and is tied

818  
00:31:20,019 --> 00:31:23,650  
strongly to scientific knowledge it

819  
00:31:21,910 --> 00:31:26,320  
involves following a methodology based

820  
00:31:23,650 --> 00:31:28,600  
on scientific inquiry it's not a set of

821  
00:31:26,319 --> 00:31:30,639  
conclusions or there is an ultimate

822  
00:31:28,599 --> 00:31:32,349  
truth skepticism is about what do we

823  
00:31:30,640 --> 00:31:34,270  
know now and there's always the

824  
00:31:32,349 --> 00:31:35,949  
potential that things could change in

825  
00:31:34,269 --> 00:31:38,139  
the future now that's an important

826  
00:31:35,950 --> 00:31:40,170  
distinction to be made one of the most

827

00:31:38,140 --> 00:31:43,270  
detailed lectures that I've attended

828  
00:31:40,170 --> 00:31:46,269  
online upon this subject was in fact by

829  
00:31:43,269 --> 00:31:48,519  
dr. Steven novella to paraphrase him you

830  
00:31:46,269 --> 00:31:50,829  
don't assume that there is or isn't an

831  
00:31:48,519 --> 00:31:53,910  
existence of the supernatural but what

832  
00:31:50,829 --> 00:31:57,039  
can be observed so far is what you go by

833  
00:31:53,910 --> 00:31:58,870  
so basically being skeptical means you

834  
00:31:57,039 --> 00:32:01,210  
investigate nature as if it's

835  
00:31:58,869 --> 00:32:02,559  
naturalistic or materialistic and you

836  
00:32:01,210 --> 00:32:04,660  
follow a methodology within that

837  
00:32:02,559 --> 00:32:06,429  
paradigm in this way we can see how

838  
00:32:04,660 --> 00:32:08,769  
scepticism contributes to understanding

839  
00:32:06,430 --> 00:32:11,140  
a process behind what do we know about

840  
00:32:08,769 --> 00:32:12,609  
what we know in psychology there's a

841  
00:32:11,140 --> 00:32:16,060

variety of contributions from

842

00:32:12,609 --> 00:32:17,799

anomalistic psychology and even power

843

00:32:16,059 --> 00:32:20,289

psychology you can look at cognitive

844

00:32:17,799 --> 00:32:22,149

biases for example there's dozens of

845

00:32:20,289 --> 00:32:24,369

these the vonahrish will staff effect

846

00:32:22,150 --> 00:32:26,019

for example things that stick out like a

847

00:32:24,369 --> 00:32:27,849

sore thumb you're more likely to notice

848

00:32:26,019 --> 00:32:30,430

them we started talking about one

849

00:32:27,849 --> 00:32:31,929

earlier as well about how you can have

850

00:32:30,430 --> 00:32:34,180

visual illusions but you're going to

851

00:32:31,930 --> 00:32:35,740

serve all illusions illusions of the ear

852

00:32:34,180 --> 00:32:38,080

where you start thinking that what is

853

00:32:35,740 --> 00:32:40,509

being said in garbled tones is something

854

00:32:38,079 --> 00:32:41,859

really being said in English or a

855

00:32:40,509 --> 00:32:43,839

variety of other languages depending

856  
00:32:41,859 --> 00:32:46,119  
where you're from there's the gamblers

857  
00:32:43,839 --> 00:32:47,709  
fallacy you flipped a coin you've got

858  
00:32:46,119 --> 00:32:51,209  
five heads the next one is bound to be a

859  
00:32:47,710 --> 00:32:53,860  
tail and this is what keeps people

860  
00:32:51,210 --> 00:32:55,600  
making a lot of money the casinos the

861  
00:32:53,859 --> 00:32:57,309  
hope that the next one will be the

862  
00:32:55,599 --> 00:32:58,569  
winner there's personality factors

863  
00:32:57,309 --> 00:32:59,980  
involved in whether or not people

864  
00:32:58,569 --> 00:33:01,990  
believe in weird things there's

865  
00:32:59,980 --> 00:33:03,849  
developmental issues magical thinking

866  
00:33:01,990 --> 00:33:06,519  
how many of you used to believe that

867  
00:33:03,849 --> 00:33:08,769  
Teddy had feelings or better yet that

868  
00:33:06,519 --> 00:33:11,410  
kicking the door frame when it got in

869  
00:33:08,769 --> 00:33:13,539  
your way would punish the door that's a

870  
00:33:11,410 --> 00:33:14,759  
good example what prj would call magical

871  
00:33:13,539 --> 00:33:17,098  
thinking believing that things

872  
00:33:14,759 --> 00:33:18,838  
feelings and it even extends into modern

873  
00:33:17,098 --> 00:33:21,378  
day times there is a variation on it

874  
00:33:18,838 --> 00:33:23,999  
which was studied by a group of Helsinki

875  
00:33:21,378 --> 00:33:27,448  
psychologists where they offered people

876  
00:33:23,999 --> 00:33:29,548  
a jumper here would you wear this oh yes

877  
00:33:27,449 --> 00:33:31,940  
I'd wear that it used to be owned by

878  
00:33:29,548 --> 00:33:34,319  
mass murderer would you wear it no way

879  
00:33:31,940 --> 00:33:37,769  
it's not a jumper I'm not touching that

880  
00:33:34,319 --> 00:33:39,628  
it was owned by mass murder no Hitler's

881  
00:33:37,769 --> 00:33:41,338  
moustache brush was another one which

882  
00:33:39,628 --> 00:33:45,088  
came up would you touch it was mustered

883  
00:33:41,338 --> 00:33:46,798  
no I never would the nature of memory is

884

00:33:45,088 --> 00:33:48,388  
another one that comes up again and

885  
00:33:46,798 --> 00:33:50,158  
again and we may have heard several

886  
00:33:48,388 --> 00:33:53,638  
times about how people's memory have

887  
00:33:50,159 --> 00:33:55,109  
been distorted through court cases yes I

888  
00:33:53,638 --> 00:33:57,448  
believe that that was the masked man

889  
00:33:55,108 --> 00:33:59,698  
there and yet we are notoriously

890  
00:33:57,449 --> 00:34:01,469  
unreliable one of my favorite papers

891  
00:33:59,699 --> 00:34:03,509  
came up by Prince epi and Smith this

892  
00:34:01,469 --> 00:34:05,699  
year it's called the truth the whole

893  
00:34:03,509 --> 00:34:07,649  
truth and nothing but the truth how

894  
00:34:05,699 --> 00:34:10,588  
belief in the tooth fairy can engender

895  
00:34:07,648 --> 00:34:12,449  
false memories do examine house

896  
00:34:10,588 --> 00:34:14,518  
children's fantasy beliefs can affect

897  
00:34:12,449 --> 00:34:16,138  
your memory for your experiences five

898  
00:34:14,518 --> 00:34:18,239

and six-year-olds with differing levels

899

00:34:16,139 --> 00:34:19,740

of belief in the Tooth Fairy were asked

900

00:34:18,239 --> 00:34:21,838

to recall what they knew about the tooth

901

00:34:19,739 --> 00:34:23,548

fairy those who believed in it suddenly

902

00:34:21,838 --> 00:34:24,929

came up with amazing supernatural

903

00:34:23,548 --> 00:34:27,358

stories of what happened with their

904

00:34:24,929 --> 00:34:29,309

tooth got taken away those who knew that

905

00:34:27,358 --> 00:34:30,838

the Tooth Fairy is just a myth just gave

906

00:34:29,309 --> 00:34:33,089

straightforward factual explanations I

907

00:34:30,838 --> 00:34:35,219

look there wasn't gone there got money

908

00:34:33,088 --> 00:34:38,489

brought candy lots more teeth it was

909

00:34:35,219 --> 00:34:40,528

great the psychology of deception and

910

00:34:38,489 --> 00:34:42,178

self-deception magic tricks and this is

911

00:34:40,528 --> 00:34:44,278

probably one of the most popular things

912

00:34:42,179 --> 00:34:46,019

that you can get on stage whenever you

913  
00:34:44,278 --> 00:34:48,809  
go to a conference about anomalistic

914  
00:34:46,018 --> 00:34:50,250  
psychology parapsychology anything to do

915  
00:34:48,809 --> 00:34:52,079  
with skeptics you're going to get

916  
00:34:50,250 --> 00:34:54,719  
magicians up on the stage Penn and

917  
00:34:52,079 --> 00:34:57,559  
Teller is a popular one they have a show

918  
00:34:54,719 --> 00:34:59,429  
many people see it many people recorded

919  
00:34:57,559 --> 00:35:00,660  
many people are quite shocked by the

920  
00:34:59,429 --> 00:35:03,000  
language in it there's only one episode

921  
00:35:00,659 --> 00:35:04,500  
of the show that I can use and that is

922  
00:35:03,000 --> 00:35:07,619  
the one on the Ouija boards because they

923  
00:35:04,500 --> 00:35:08,608  
only swear twice I always talk to the

924  
00:35:07,619 --> 00:35:10,829  
students ahead of time so they're going

925  
00:35:08,608 --> 00:35:12,028  
to say too bad I'm really sorry and then

926  
00:35:10,829 --> 00:35:14,700  
they say we know more words in that I

927

00:35:12,028 --> 00:35:17,579

can get thanks cutie regret but

928

00:35:14,699 --> 00:35:19,199

self-deception and self-delusion it's a

929

00:35:17,579 --> 00:35:20,880

big one there are range of other

930

00:35:19,199 --> 00:35:22,558

psychological variables of study in

931

00:35:20,880 --> 00:35:23,849

regards to this I mean how claims are

932

00:35:22,559 --> 00:35:25,920

approached and of course you get

933

00:35:23,849 --> 00:35:27,390

overlaps all the time within normal

934

00:35:25,920 --> 00:35:29,099

psychology so there's two

935

00:35:27,389 --> 00:35:31,920

areas for skeptics is one thing that has

936

00:35:29,099 --> 00:35:34,349

been argued by a popular skeptic the man

937

00:35:31,920 --> 00:35:37,200

who writes junior skeptic Daniel Loxton

938

00:35:34,349 --> 00:35:39,150

on the podcast skeptic ality says that

939

00:35:37,199 --> 00:35:40,919

one is the promotion of science literacy

940

00:35:39,150 --> 00:35:42,660

and critical thinking and the other is

941

00:35:40,920 --> 00:35:45,108  
consumer protection in fringe science

942  
00:35:42,659 --> 00:35:47,278  
areas in regards to paranormal claims

943  
00:35:45,108 --> 00:35:49,440  
now I must admit that there was the

944  
00:35:47,278 --> 00:35:52,139  
consumer protection idea that first drew

945  
00:35:49,440 --> 00:35:53,849  
me into looking at skeptical ideas

946  
00:35:52,139 --> 00:35:55,500  
possibly due to an interest in

947  
00:35:53,849 --> 00:35:56,940  
documentaries there was a TV show back

948  
00:35:55,500 --> 00:35:58,500  
in the 80s called the investigators

949  
00:35:56,940 --> 00:36:01,170  
involving people who are being ripped

950  
00:35:58,500 --> 00:36:02,940  
off by frauds and scams and the idea

951  
00:36:01,170 --> 00:36:05,579  
that people could watch out for this

952  
00:36:02,940 --> 00:36:07,139  
that the con man could be taken apart

953  
00:36:05,579 --> 00:36:09,510  
and shown to have several techniques

954  
00:36:07,139 --> 00:36:14,118  
that it was using that you could protect

955  
00:36:09,510 --> 00:36:14,119

yourself so why skepticism not atheism

956

00:36:14,358 --> 00:36:19,889

yes I believe they've taken gullible out

957

00:36:17,699 --> 00:36:21,419

of the dictionary and they've said god

958

00:36:19,889 --> 00:36:25,618

you're an idiot and you turn to idiot

959

00:36:21,420 --> 00:36:27,230

and it says not you again oh there we

960

00:36:25,619 --> 00:36:29,670

are studies our beliefs on weird things

961

00:36:27,230 --> 00:36:32,039

that's not a limited list by the way

962

00:36:29,670 --> 00:36:33,298

this is probably the most popular list

963

00:36:32,039 --> 00:36:36,119

of things that you'll get for weird

964

00:36:33,298 --> 00:36:37,559

things ESP peak a psychic readings

965

00:36:36,119 --> 00:36:39,000

psychic healing alternative and

966

00:36:37,559 --> 00:36:40,769

complementary medicine out-of-body and

967

00:36:39,000 --> 00:36:42,268

near death experiences astrology and

968

00:36:40,768 --> 00:36:45,629

other divinatory techniques

969

00:36:42,268 --> 00:36:48,389

reincarnation UFOs and aliens ghosts

970  
00:36:45,630 --> 00:36:50,970  
poltergeists crystal power dowsing two

971  
00:36:48,389 --> 00:36:53,578  
of my favorite ones include sports

972  
00:36:50,969 --> 00:36:57,568  
superstitions and theater superstitions

973  
00:36:53,579 --> 00:36:59,309  
and whenever I find myself approached by

974  
00:36:57,568 --> 00:37:01,079  
someone who I think is going to be

975  
00:36:59,309 --> 00:37:02,700  
resisting the idea of looking at these

976  
00:37:01,079 --> 00:37:03,690  
beliefs I medley start off by saying

977  
00:37:02,699 --> 00:37:05,338  
well let's have a look at theater

978  
00:37:03,690 --> 00:37:06,568  
superstitions and if I guess oh wow yeah

979  
00:37:05,338 --> 00:37:08,009  
like you have to turn around the top to

980  
00:37:06,568 --> 00:37:10,288  
hit five times I'm gonna do if you say

981  
00:37:08,009 --> 00:37:13,980  
the word Macbeth on a state Macbeth

982  
00:37:10,289 --> 00:37:17,519  
Macbeth nothing happened then you're

983  
00:37:13,980 --> 00:37:18,778  
going wearing the same socks again and

984  
00:37:17,518 --> 00:37:20,939  
again and again if you're a hockey

985  
00:37:18,778 --> 00:37:22,528  
player the people in the audience have

986  
00:37:20,940 --> 00:37:24,929  
certain rituals that they must do

987  
00:37:22,528 --> 00:37:27,869  
otherwise the cricketers not going to

988  
00:37:24,929 --> 00:37:30,268  
get the match fascinating the most

989  
00:37:27,869 --> 00:37:32,910  
research that you'll find on particular

990  
00:37:30,268 --> 00:37:34,889  
superstitious beliefs it's sports again

991  
00:37:32,909 --> 00:37:38,969  
and again again there are many famous

992  
00:37:34,889 --> 00:37:40,569  
sports people's generally in baseball

993  
00:37:38,969 --> 00:37:43,209  
because baseball is incredibly popular

994  
00:37:40,570 --> 00:37:45,280  
last time in America they just go wild

995  
00:37:43,210 --> 00:37:47,789  
go backstage and ask every baseball ok

996  
00:37:45,280 --> 00:37:50,610  
which about you use which foot rooting I

997  
00:37:47,789 --> 00:37:53,019  
remember when I first handed in my

998

00:37:50,610 --> 00:37:54,849  
proposal to my professor at UWA if you

999  
00:37:53,019 --> 00:37:56,769  
said you're using too many abbreviations

1000  
00:37:54,849 --> 00:37:59,230  
I don't know what they mean and I said

1001  
00:37:56,769 --> 00:38:00,460  
oh you mean like PK psychokinesis the

1002  
00:37:59,230 --> 00:38:02,019  
belief that you can move something like

1003  
00:38:00,460 --> 00:38:05,619  
just using your mind he said no I don't

1004  
00:38:02,019 --> 00:38:07,389  
know what OCD means I said

1005  
00:38:05,619 --> 00:38:09,159  
obsessive-compulsive disorder so why is

1006  
00:38:07,389 --> 00:38:10,569  
that important because people get

1007  
00:38:09,159 --> 00:38:12,219  
worried whether or not you're saying

1008  
00:38:10,570 --> 00:38:14,289  
someone has a particular ritual again

1009  
00:38:12,219 --> 00:38:16,509  
and again before they go up to the bat

1010  
00:38:14,289 --> 00:38:18,849  
or to hit the ball is it ritual because

1011  
00:38:16,510 --> 00:38:19,780  
of superstition or is it OCD these are

1012  
00:38:18,849 --> 00:38:22,929

the sort of things that you have to

1013

00:38:19,780 --> 00:38:25,480

start going into now I personally define

1014

00:38:22,929 --> 00:38:28,210

atheism as a lack of belief in a date he

1015

00:38:25,480 --> 00:38:29,679

of any sort defined or not now there's a

1016

00:38:28,210 --> 00:38:31,510

variety of reasons why someone might

1017

00:38:29,679 --> 00:38:34,389

call themselves an atheist sometimes it

1018

00:38:31,510 --> 00:38:35,860

might be personal experience sometimes

1019

00:38:34,389 --> 00:38:37,869

people have gone through a massive

1020

00:38:35,860 --> 00:38:41,200

experience in their lives and reasoned

1021

00:38:37,869 --> 00:38:43,599

it out it varies there's so many how I

1022

00:38:41,199 --> 00:38:45,849

came to be accounts and it'd be lovely

1023

00:38:43,599 --> 00:38:48,369

to see more books on this skepticism

1024

00:38:45,849 --> 00:38:50,500

however rarely takes on fundamental

1025

00:38:48,369 --> 00:38:51,940

religion claims directly and certainly

1026

00:38:50,500 --> 00:38:54,489

not within the bounds of their normal

1027  
00:38:51,940 --> 00:38:56,380  
skeptical investigations the essay by

1028  
00:38:54,489 --> 00:38:58,479  
Daniel Loxton where do we go from here

1029  
00:38:56,380 --> 00:39:00,400  
discuss the important of dealing with

1030  
00:38:58,480 --> 00:39:02,679  
this core business of skepticism because

1031  
00:39:00,400 --> 00:39:04,570  
there are groups like atheists humanists

1032  
00:39:02,679 --> 00:39:06,399  
secular humanists and so forth who are

1033  
00:39:04,570 --> 00:39:08,230  
doing a massively popular job on

1034  
00:39:06,400 --> 00:39:09,820  
investigating a variety of things that

1035  
00:39:08,230 --> 00:39:13,329  
fundamentalists do and that religions

1036  
00:39:09,820 --> 00:39:15,160  
too big one at the moment protests about

1037  
00:39:13,329 --> 00:39:16,960  
World Youth Day I know that there's been

1038  
00:39:15,159 --> 00:39:19,210  
quite a lot of organization in regards

1039  
00:39:16,960 --> 00:39:20,740  
to protesting how right to human rights

1040  
00:39:19,210 --> 00:39:23,199  
have been taken away due to world youth

1041  
00:39:20,739 --> 00:39:25,239  
today yet an atheist can still believe

1042  
00:39:23,199 --> 00:39:27,399  
that their horoscope is true an atheist

1043  
00:39:25,239 --> 00:39:29,139  
can quite easily believe that human

1044  
00:39:27,400 --> 00:39:30,610  
beings never landed on the moon you can

1045  
00:39:29,139 --> 00:39:32,349  
have all sorts of conspiracy theory

1046  
00:39:30,610 --> 00:39:34,960  
beliefs that are believed by a variety

1047  
00:39:32,349 --> 00:39:36,579  
of people I've had students who were

1048  
00:39:34,960 --> 00:39:38,559  
Buddhists tell me that their tarot cards

1049  
00:39:36,579 --> 00:39:40,389  
could tell them the future and I've had

1050  
00:39:38,559 --> 00:39:42,429  
atheists tell me that the moon makes

1051  
00:39:40,389 --> 00:39:44,710  
people more crazy than usual of course

1052  
00:39:42,429 --> 00:39:47,049  
it does full moon people go crazy they

1053  
00:39:44,710 --> 00:39:49,240  
go nuts crime rates skyrocket there's

1054  
00:39:47,050 --> 00:39:50,830  
been study after study after study after

1055

00:39:49,239 --> 00:39:51,939  
study showing that this isn't true but

1056  
00:39:50,829 --> 00:39:53,739  
yeah

1057  
00:39:51,940 --> 00:39:55,150  
it's just something about the moon kids

1058  
00:39:53,739 --> 00:39:57,119  
turn into Wells you look at them in a

1059  
00:39:55,150 --> 00:39:59,349  
playground they're just going bonkers

1060  
00:39:57,119 --> 00:40:01,359  
yeah there must be something in it

1061  
00:39:59,349 --> 00:40:03,789  
likewise skepticism isn't a belief

1062  
00:40:01,360 --> 00:40:05,590  
system what matters is the evidence you

1063  
00:40:03,789 --> 00:40:07,449  
can see how the two there are elements

1064  
00:40:05,590 --> 00:40:09,820  
within skepticism that would certainly

1065  
00:40:07,449 --> 00:40:12,549  
appeal to atheists and yet I still see

1066  
00:40:09,820 --> 00:40:14,740  
the two is distinct certainly a close-up

1067  
00:40:12,550 --> 00:40:17,680  
Venn diagram at times but in my mind

1068  
00:40:14,739 --> 00:40:18,939  
distinct as a teacher there are certain

1069  
00:40:17,679 --> 00:40:20,919

elements that I've come up against which

1070

00:40:18,940 --> 00:40:23,019

are just examples of sheer bad science

1071

00:40:20,920 --> 00:40:24,670

and it didn't matter if that science

1072

00:40:23,019 --> 00:40:28,000

teachers are working with were the

1073

00:40:24,670 --> 00:40:29,740

Muslim Christian atheist never told me

1074

00:40:28,000 --> 00:40:31,929

there were things in which we were just

1075

00:40:29,739 --> 00:40:33,629

got our water I've got to that I'll

1076

00:40:31,929 --> 00:40:35,799

discuss which might be of interest you

1077

00:40:33,630 --> 00:40:38,019

not just those who are atheists or

1078

00:40:35,800 --> 00:40:39,400

skeptic or whatever but in the interest

1079

00:40:38,019 --> 00:40:40,449

of education of young people there's

1080

00:40:39,400 --> 00:40:42,849

some pretty shocking things that are

1081

00:40:40,449 --> 00:40:44,799

going out there as a final point what's

1082

00:40:42,849 --> 00:40:46,150

critical thinking taking a skeptical

1083

00:40:44,800 --> 00:40:48,400

approach is not the only way that we can

1084  
00:40:46,150 --> 00:40:49,809  
think there's introspection you can

1085  
00:40:48,400 --> 00:40:52,750  
develop your reasoning based upon

1086  
00:40:49,809 --> 00:40:54,610  
emotions there's postmodernist ideas

1087  
00:40:52,750 --> 00:40:56,469  
involved in social construction creating

1088  
00:40:54,610 --> 00:40:58,090  
and narrative of what is truth you get

1089  
00:40:56,469 --> 00:41:00,069  
this and literary criticism all the time

1090  
00:40:58,090 --> 00:41:02,019  
there's a variety approaches in

1091  
00:41:00,070 --> 00:41:04,230  
philosophy to thinking and all of these

1092  
00:41:02,019 --> 00:41:06,429  
should be taught in philosophy classes

1093  
00:41:04,230 --> 00:41:08,320  
critical thinking is defined by Greg

1094  
00:41:06,429 --> 00:41:11,169  
Haskins in a practical guide to critical

1095  
00:41:08,320 --> 00:41:12,730  
thinking as a process by which we use

1096  
00:41:11,170 --> 00:41:14,230  
our knowledge and intelligence to

1097  
00:41:12,730 --> 00:41:16,150  
effectively arrive at the most

1098  
00:41:14,230 --> 00:41:18,940  
reasonable and justifiable position on

1099  
00:41:16,150 --> 00:41:22,150  
issues this may not be the most reasoned

1100  
00:41:18,940 --> 00:41:23,710  
way but certainly becomes across the one

1101  
00:41:22,150 --> 00:41:25,900  
as reasonable you could defend it and

1102  
00:41:23,710 --> 00:41:27,429  
which endeavours to identify and

1103  
00:41:25,900 --> 00:41:29,019  
overcome the numerous hindrances to

1104  
00:41:27,429 --> 00:41:30,879  
rational thinking regarding the

1105  
00:41:29,019 --> 00:41:33,519  
philosophical approach to skepticism as

1106  
00:41:30,880 --> 00:41:36,220  
i mentioned that radical skepticism such

1107  
00:41:33,519 --> 00:41:38,500  
as shown by pyro it has the notion that

1108  
00:41:36,219 --> 00:41:40,149  
we know nothing at all regarding schools

1109  
00:41:38,500 --> 00:41:42,010  
and education within the philosophy and

1110  
00:41:40,150 --> 00:41:44,019  
ethics course which only started this

1111  
00:41:42,010 --> 00:41:45,430  
year for you eleven students next year

1112

00:41:44,019 --> 00:41:47,650  
will be open for your twelve students

1113  
00:41:45,429 --> 00:41:49,659  
and within the education in general yes

1114  
00:41:47,650 --> 00:41:51,730  
students should be allowed to are

1115  
00:41:49,659 --> 00:41:53,739  
skeptical questions put constructive

1116  
00:41:51,730 --> 00:41:55,929  
answers in reply feel free to go either

1117  
00:41:53,739 --> 00:41:57,369  
way play the devil's advocate to take a

1118  
00:41:55,929 --> 00:41:59,529  
sign that they don't necessarily believe

1119  
00:41:57,369 --> 00:42:01,869  
in it's all part of education as far as

1120  
00:41:59,530 --> 00:42:03,460  
I'm concerned the goal of critical

1121  
00:42:01,869 --> 00:42:05,199  
thinking is not to create clever clever

1122  
00:42:03,460 --> 00:42:07,480  
elitist to go around knocking

1123  
00:42:05,199 --> 00:42:10,419  
things down I've got a favorite short

1124  
00:42:07,480 --> 00:42:12,789  
story love as a fallacy imagines himself

1125  
00:42:10,420 --> 00:42:14,619  
to be such an elitist that he can

1126  
00:42:12,789 --> 00:42:17,858

convince the young woman that he can

1127

00:42:14,619 --> 00:42:20,320

fall in love with him just do to logical

1128

00:42:17,858 --> 00:42:23,230

reasoning it doesn't work eventually she

1129

00:42:20,320 --> 00:42:24,670

shows him ah eventually she shows and

1130

00:42:23,230 --> 00:42:27,190

that in the end the hearts going to win

1131

00:42:24,670 --> 00:42:28,809

out it's a nice cute story and all but

1132

00:42:27,190 --> 00:42:31,150

certainly one that we like to discuss

1133

00:42:28,809 --> 00:42:32,889

with students that very few philosophers

1134

00:42:31,150 --> 00:42:34,838

are actually skeptics and to study

1135

00:42:32,889 --> 00:42:37,509

critical thinking philosophy logical

1136

00:42:34,838 --> 00:42:38,858

reasoning and to remove a huge bulk of

1137

00:42:37,510 --> 00:42:40,750

the tradition would be doing a

1138

00:42:38,858 --> 00:42:43,059

disservice it would become a very boring

1139

00:42:40,750 --> 00:42:45,338

course I think quite frankly so although

1140

00:42:43,059 --> 00:42:47,409

we distinguish skepticism as a process

1141  
00:42:45,338 --> 00:42:48,969  
we see evidence and make good arguments

1142  
00:42:47,409 --> 00:42:51,338  
of all claims usually related to the

1143  
00:42:48,969 --> 00:42:52,539  
paranormal pseudoscience important to

1144  
00:42:51,338 --> 00:42:54,759  
realize that there's other elements

1145  
00:42:52,539 --> 00:42:57,369  
weird things ladies and gentlemen in

1146  
00:42:54,760 --> 00:42:59,470  
front of you is a copy of today's

1147  
00:42:57,369 --> 00:43:01,000  
horoscope well it would be today's

1148  
00:42:59,469 --> 00:43:03,489  
horoscope if it wasn't for the fact that

1149  
00:43:01,000 --> 00:43:06,608  
Aries Sagittarius cancer Capricorn

1150  
00:43:03,489 --> 00:43:08,289  
they've all been removed can you spot

1151  
00:43:06,608 --> 00:43:10,869  
yourself after experiencing what you

1152  
00:43:08,289 --> 00:43:12,219  
went through today there's one or two on

1153  
00:43:10,869 --> 00:43:14,349  
there that which are really quite nasty

1154  
00:43:12,219 --> 00:43:17,078  
which shocked me and put me in fact in

1155  
00:43:14,349 --> 00:43:20,109  
mind of Douglas Adams and other famous

1156  
00:43:17,079 --> 00:43:22,660  
atheists who in his stories about Dirk

1157  
00:43:20,108 --> 00:43:24,848  
Gently had the sad experience of Dirk

1158  
00:43:22,659 --> 00:43:27,789  
Gently who managed to very much annoy a

1159  
00:43:24,849 --> 00:43:29,710  
local horoscope writer and so because

1160  
00:43:27,789 --> 00:43:31,449  
the horoscope right in you Gentiles

1161  
00:43:29,710 --> 00:43:33,909  
birthday would always purposely make

1162  
00:43:31,449 --> 00:43:35,889  
that particular horoscope sign the worst

1163  
00:43:33,909 --> 00:43:37,809  
one ever it's like you're going to die

1164  
00:43:35,889 --> 00:43:39,460  
in a hole but people would write in the

1165  
00:43:37,809 --> 00:43:40,568  
newspaper complaining how come cancer is

1166  
00:43:39,460 --> 00:43:42,849  
saying that i'm going to die in a hole

1167  
00:43:40,568 --> 00:43:44,440  
were burning plane crash and pope i get

1168  
00:43:42,849 --> 00:43:45,818  
eaten by piranhas but he would just keep

1169

00:43:44,440 --> 00:43:47,530  
on doing it just to annoy Dirk Gently

1170  
00:43:45,818 --> 00:43:49,989  
this ladies and gentlemen was

1171  
00:43:47,530 --> 00:43:52,839  
essentially what my high school has come

1172  
00:43:49,989 --> 00:43:55,598  
up with they got a sheet of paper cut

1173  
00:43:52,838 --> 00:43:58,900  
out all the elements which identified

1174  
00:43:55,599 --> 00:44:01,450  
who was what gave it out to students in

1175  
00:43:58,900 --> 00:44:03,220  
the playground and said who are you and

1176  
00:44:01,449 --> 00:44:05,318  
they found out how many people were able

1177  
00:44:03,219 --> 00:44:07,179  
to accurately figure out who they were I

1178  
00:44:05,318 --> 00:44:09,730  
think they had a success rate of about

1179  
00:44:07,179 --> 00:44:12,219  
out of a hundred students two percent

1180  
00:44:09,730 --> 00:44:14,920  
this is how they studied the notion of

1181  
00:44:12,219 --> 00:44:17,149  
the Barnum effect or the for effect

1182  
00:44:14,920 --> 00:44:19,039  
which is you put out a nice

1183  
00:44:17,150 --> 00:44:21,289

blanket statement which could apply to

1184

00:44:19,039 --> 00:44:23,559

anyone and people will automatically

1185

00:44:21,289 --> 00:44:26,210

start to say oh yes this could be me

1186

00:44:23,559 --> 00:44:28,640

there is another experiment which james

1187

00:44:26,210 --> 00:44:30,230

randi does in one of his famous videos

1188

00:44:28,639 --> 00:44:32,420

that you can find online thanks to the

1189

00:44:30,230 --> 00:44:36,349

wonder of YouTube and it's marvelous

1190

00:44:32,420 --> 00:44:38,329

disregard for copyright where he hands

1191

00:44:36,349 --> 00:44:39,740

out a for effect statement to a variety

1192

00:44:38,329 --> 00:44:41,630

of people telling them this was

1193

00:44:39,739 --> 00:44:43,368

specially made for you and then he asked

1194

00:44:41,630 --> 00:44:45,710

for handed up how many people think that

1195

00:44:43,369 --> 00:44:48,108

out of accuracy this is a 4 out of 5

1196

00:44:45,710 --> 00:44:49,940

most people put the hands up five out of

1197

00:44:48,108 --> 00:44:54,650

five the rest of the class but the hands

1198  
00:44:49,940 --> 00:44:56,150  
up please derren brown's another

1199  
00:44:54,650 --> 00:44:57,500  
fabulous one again thanks to the

1200  
00:44:56,150 --> 00:44:58,940  
wonderful disregard a copyright on

1201  
00:44:57,500 --> 00:45:01,039  
youtube you can find it yourself with a

1202  
00:44:58,940 --> 00:45:05,048  
couple of search angels prepare to get

1203  
00:45:01,039 --> 00:45:08,599  
the unicycle potential yet talipes

1204  
00:45:05,048 --> 00:45:10,190  
astrological chart is out so far because

1205  
00:45:08,599 --> 00:45:13,700  
of the ships of the year that is huggies

1206  
00:45:10,190 --> 00:45:15,858  
i think is 26 degrees food but i think

1207  
00:45:13,699 --> 00:45:17,629  
it's that much it means that all your

1208  
00:45:15,858 --> 00:45:20,328  
astrological charts are so far out that

1209  
00:45:17,630 --> 00:45:22,670  
they're talking about yes and the sign

1210  
00:45:20,329 --> 00:45:24,829  
of a fuchsias is missing as well the

1211  
00:45:22,670 --> 00:45:27,019  
idea that pattalam ease chart doesn't

1212  
00:45:24,829 --> 00:45:29,180  
accurately match what is happening now

1213  
00:45:27,019 --> 00:45:30,858  
in 2008 yes that's true they're so

1214  
00:45:29,179 --> 00:45:33,259  
illogical bodies have moved over time

1215  
00:45:30,858 --> 00:45:34,818  
and so how much relevance is has a god

1216  
00:45:33,260 --> 00:45:36,140  
and there's the missing sign of fuchsias

1217  
00:45:34,818 --> 00:45:37,548  
which I would usually show to the

1218  
00:45:36,139 --> 00:45:39,618  
students and point out to them that in

1219  
00:45:37,548 --> 00:45:41,690  
fact the astrological sign had often

1220  
00:45:39,619 --> 00:45:44,358  
shifted by one or two places northern

1221  
00:45:41,690 --> 00:45:47,869  
and northern hemisphere as well yeah so

1222  
00:45:44,358 --> 00:45:49,429  
there's a variety of things which yes

1223  
00:45:47,869 --> 00:45:51,079  
and it's something that students can

1224  
00:45:49,429 --> 00:45:54,139  
write a lot about which is fabulous

1225  
00:45:51,079 --> 00:45:56,660  
they're able to research write it out in

1226

00:45:54,139 --> 00:45:58,548  
a logical manner do surveys do the stats

1227  
00:45:56,659 --> 00:46:00,230  
behind it come back to a wonderful

1228  
00:45:58,548 --> 00:46:02,449  
presentation from the class it's great

1229  
00:46:00,230 --> 00:46:04,278  
and yet there's issues with this this

1230  
00:46:02,449 --> 00:46:06,288  
was a simple activity that I could do

1231  
00:46:04,278 --> 00:46:07,699  
with high school students and yet you

1232  
00:46:06,289 --> 00:46:09,650  
have to realize the sort of culture that

1233  
00:46:07,699 --> 00:46:11,088  
we live in people make money out of

1234  
00:46:09,650 --> 00:46:13,250  
these people make a lot of money on

1235  
00:46:11,088 --> 00:46:16,159  
people managed to get themselves in

1236  
00:46:13,250 --> 00:46:17,510  
women's day for the entire career just

1237  
00:46:16,159 --> 00:46:19,278  
based on the ability to come up with

1238  
00:46:17,510 --> 00:46:21,499  
those poor infected items

1239  
00:46:19,278 --> 00:46:23,389  
and in some cases yes they furman

1240  
00:46:21,498 --> 00:46:25,639

believe in it entire families depend

1241

00:46:23,389 --> 00:46:27,889

upon it and as Daniel Loxton himself

1242

00:46:25,639 --> 00:46:29,929

says about some of the more recent stats

1243

00:46:27,889 --> 00:46:32,028

it's emphatically the case the

1244

00:46:29,929 --> 00:46:33,798

paranormal police are widespread the

1245

00:46:32,028 --> 00:46:35,778

notion that traditional paranormal

1246

00:46:33,798 --> 00:46:37,518

topics are dead it flies in the face of

1247

00:46:35,778 --> 00:46:39,708

the fact that according to a gallup poll

1248

00:46:37,518 --> 00:46:41,808

in 2005 three-quarters of Americans

1249

00:46:39,708 --> 00:46:44,149

believe at least one claim from a list

1250

00:46:41,809 --> 00:46:45,709

of 10 classic paranormal items for

1251

00:46:44,150 --> 00:46:47,119

example if you have no opinion regarding

1252

00:46:45,708 --> 00:46:48,558

astrology although the position and

1253

00:46:47,119 --> 00:46:50,449

stars and planets can affect people's

1254

00:46:48,559 --> 00:46:52,449

lives fully twenty five percent of

1255  
00:46:50,449 --> 00:46:54,979  
americans say they believe in astrology

1256  
00:46:52,449 --> 00:46:57,949  
and if you're keeping count that's 75

1257  
00:46:54,978 --> 00:47:00,018  
million people in the US alone my own

1258  
00:46:57,949 --> 00:47:02,059  
research the most recent major

1259  
00:47:00,018 --> 00:47:06,408  
paranormal research that's come out is

1260  
00:47:02,059 --> 00:47:08,509  
from the UK the ipsos mori in 2007 held

1261  
00:47:06,409 --> 00:47:10,130  
in the UK the third of people believe

1262  
00:47:08,509 --> 00:47:12,289  
that governments around the world are

1263  
00:47:10,130 --> 00:47:15,650  
concealing evidence of extraterrestrial

1264  
00:47:12,289 --> 00:47:17,059  
beings nine percent yeah nine percent

1265  
00:47:15,650 --> 00:47:19,668  
believe that crop circles are the work

1266  
00:47:17,059 --> 00:47:21,949  
of extraterrestrial forces my year

1267  
00:47:19,668 --> 00:47:24,288  
eights created a crop circle on the

1268  
00:47:21,949 --> 00:47:26,059  
front lawn by simply using planks of

1269  
00:47:24,289 --> 00:47:28,278  
wood and by getting it was a class of

1270  
00:47:26,059 --> 00:47:29,900  
about 22 they just stomped on it they

1271  
00:47:28,278 --> 00:47:31,880  
stomped and stomped and stomped until

1272  
00:47:29,900 --> 00:47:35,269  
they created a big beautiful smiley face

1273  
00:47:31,880 --> 00:47:37,039  
in the lawn their very own crop circle

1274  
00:47:35,268 --> 00:47:40,008  
it was that easy we took photographic

1275  
00:47:37,039 --> 00:47:41,749  
evidence and yet people still continue

1276  
00:47:40,009 --> 00:47:46,329  
to write books I found one recently say

1277  
00:47:41,748 --> 00:47:48,708  
crop circles are the work of aliens I

1278  
00:47:46,329 --> 00:47:49,939  
know that by the time they hit year nine

1279  
00:47:48,708 --> 00:47:51,318  
so they probably started acting like

1280  
00:47:49,938 --> 00:47:54,168  
aliens but until then there were minor

1281  
00:47:51,318 --> 00:47:55,818  
eight students therefore we have worries

1282  
00:47:54,168 --> 00:47:57,828  
that students are learning of truths my

1283

00:47:55,818 --> 00:47:59,929  
daughter created a crop circle don't you

1284  
00:47:57,829 --> 00:48:04,699  
know that she is making fun of the

1285  
00:47:59,929 --> 00:48:07,358  
aliens and their artwork and and her dad

1286  
00:48:04,699 --> 00:48:10,009  
was abducted by an alien he thinks and

1287  
00:48:07,358 --> 00:48:11,670  
therefore what are you doing mocking his

1288  
00:48:10,009 --> 00:48:15,309  
beliefs as well

1289  
00:48:11,670 --> 00:48:16,690  
yeah exactly students are going to be

1290  
00:48:15,309 --> 00:48:19,090  
panicked about ghosts if you talk about

1291  
00:48:16,690 --> 00:48:21,539  
ghosts students are going to call up the

1292  
00:48:19,090 --> 00:48:23,380  
demons if you use in a Ouija board

1293  
00:48:21,539 --> 00:48:24,820  
doesn't matter that they made it

1294  
00:48:23,380 --> 00:48:26,920  
themselves out of a couple of golf balls

1295  
00:48:24,820 --> 00:48:29,559  
and bit of cardboard no this is going to

1296  
00:48:26,920 --> 00:48:32,170  
be a conduit to the other side and for

1297  
00:48:29,559 --> 00:48:33,639

them absolutely perfectly reasonable

1298

00:48:32,170 --> 00:48:36,610

they can make a case to the school in

1299

00:48:33,639 --> 00:48:39,219

the school most likely back off this has

1300

00:48:36,610 --> 00:48:41,530

been recorded before in let me see i

1301

00:48:39,219 --> 00:48:44,019

believe it was 1997 in The Skeptical

1302

00:48:41,530 --> 00:48:45,970

Inquirer a man named Larry barrio who

1303

00:48:44,019 --> 00:48:47,320

wrote about how permissions were given

1304

00:48:45,969 --> 00:48:48,819

by the school for him to do this with

1305

00:48:47,320 --> 00:48:51,010

his primary school class and then just

1306

00:48:48,820 --> 00:48:52,809

as rapidly taken away so what do you do

1307

00:48:51,010 --> 00:48:55,330

keeping that less than my mind from the

1308

00:48:52,809 --> 00:48:57,219

very beginning my own approach is pretty

1309

00:48:55,329 --> 00:48:59,980

straightforward I told everybody what I

1310

00:48:57,219 --> 00:49:02,289

was doing absolutely everybody I didn't

1311

00:48:59,980 --> 00:49:04,990

shut up about it I told the school

1312  
00:49:02,289 --> 00:49:06,460  
counselors the deputy principal the

1313  
00:49:04,989 --> 00:49:07,959  
science teachers the maths teachers

1314  
00:49:06,460 --> 00:49:09,280  
particularly regarding stats that are

1315  
00:49:07,960 --> 00:49:10,630  
really helpful when you know you don't

1316  
00:49:09,280 --> 00:49:12,130  
often get an English teacher coming and

1317  
00:49:10,630 --> 00:49:14,619  
saying okay so that the binomial that we

1318  
00:49:12,130 --> 00:49:17,410  
got here will be possibly yet they just

1319  
00:49:14,619 --> 00:49:20,589  
went freaky out of that are people value

1320  
00:49:17,409 --> 00:49:23,019  
our subject cross curricula why not I

1321  
00:49:20,590 --> 00:49:25,059  
told fellow department members i told

1322  
00:49:23,019 --> 00:49:26,530  
the boarding house very important if

1323  
00:49:25,059 --> 00:49:28,269  
you've got a boarding house because the

1324  
00:49:26,530 --> 00:49:30,490  
kids live on school campus and so forth

1325  
00:49:28,269 --> 00:49:32,679  
away from mom and dad it's all part of

1326  
00:49:30,489 --> 00:49:34,329  
pastoral care I told the media group of

1327  
00:49:32,679 --> 00:49:36,730  
the school the students won recognition

1328  
00:49:34,329 --> 00:49:39,159  
for their for their investigations we

1329  
00:49:36,730 --> 00:49:41,949  
got in the newspaper about it and yet

1330  
00:49:39,159 --> 00:49:44,339  
there are still resistance it took two

1331  
00:49:41,949 --> 00:49:46,449  
years but there was still resistance

1332  
00:49:44,340 --> 00:49:47,800  
there's also the importance of

1333  
00:49:46,449 --> 00:49:49,899  
overarching curriculum I have to

1334  
00:49:47,800 --> 00:49:52,870  
emphasize but by creating lesson plans

1335  
00:49:49,900 --> 00:49:55,180  
it was a lot of work to do this to be

1336  
00:49:52,869 --> 00:49:56,949  
able to come up with the ideas to help

1337  
00:49:55,179 --> 00:49:59,109  
the students cut out the little pieces

1338  
00:49:56,949 --> 00:50:00,939  
it was it was more than that it was

1339  
00:49:59,110 --> 00:50:02,730  
digging out resources the fact that

1340

00:50:00,940 --> 00:50:05,260  
youtube is blocked in many schools

1341  
00:50:02,730 --> 00:50:06,849  
getting videos from overseas and making

1342  
00:50:05,260 --> 00:50:09,490  
sure that level compatible on the system

1343  
00:50:06,849 --> 00:50:11,349  
at school a lot of reading a book sri

1344  
00:50:09,489 --> 00:50:12,489  
writing of articles and paraphrasing

1345  
00:50:11,349 --> 00:50:15,519  
them so it's suitable for a younger

1346  
00:50:12,489 --> 00:50:17,169  
audience it was massive in consultation

1347  
00:50:15,519 --> 00:50:19,989  
with other teachers finding resources in

1348  
00:50:17,170 --> 00:50:22,630  
both audio and visual some things just

1349  
00:50:19,989 --> 00:50:22,909  
aren't suitable Penn & Teller gone this

1350  
00:50:22,630 --> 00:50:24,349  
is

1351  
00:50:22,909 --> 00:50:26,719  
not to criticize Penn & Teller for what

1352  
00:50:24,349 --> 00:50:28,880  
they do what they do is fabulous it just

1353  
00:50:26,719 --> 00:50:30,529  
has a specific audience and it's not

1354  
00:50:28,880 --> 00:50:32,420

kids they have done stuff for kids

1355

00:50:30,530 --> 00:50:34,039

before there's a fabulous series that

1356

00:50:32,420 --> 00:50:35,298

they did about art and there were

1357

00:50:34,039 --> 00:50:37,490

elements in that which I could have used

1358

00:50:35,298 --> 00:50:39,230

Penn & Teller are perfectly within their

1359

00:50:37,489 --> 00:50:40,338

right to create what they think suiting

1360

00:50:39,230 --> 00:50:43,280

the audience that they have out there

1361

00:50:40,338 --> 00:50:44,900

but for kids it's a bit tougher I ended

1362

00:50:43,280 --> 00:50:48,200

up turning to a wider framework in the

1363

00:50:44,900 --> 00:50:50,559

end no single website could support this

1364

00:50:48,199 --> 00:50:52,788

well enough as far as I thought and

1365

00:50:50,559 --> 00:50:54,109

because I was involved with philosophy

1366

00:50:52,789 --> 00:50:55,339

for children who are contributing to the

1367

00:50:54,108 --> 00:50:57,949

philosophy and ethics course which

1368

00:50:55,338 --> 00:50:59,808

started it was much easier to get

1369  
00:50:57,949 --> 00:51:01,788  
skepticism and critical thinking in this

1370  
00:50:59,809 --> 00:51:05,329  
particular aspect by using paranormal

1371  
00:51:01,789 --> 00:51:07,160  
claims into a formal framework the

1372  
00:51:05,329 --> 00:51:08,780  
philosophy and ethics course if you are

1373  
00:51:07,159 --> 00:51:10,338  
unfamiliar with it I've got copies of

1374  
00:51:08,780 --> 00:51:12,319  
the syllabus over there feel free to

1375  
00:51:10,338 --> 00:51:14,058  
look over them philosophy is meant to be

1376  
00:51:12,318 --> 00:51:15,769  
a practical activity we do philosophy

1377  
00:51:14,059 --> 00:51:17,298  
when we seek to define something when we

1378  
00:51:15,769 --> 00:51:19,579  
challenge assumptions where we construct

1379  
00:51:17,298 --> 00:51:21,108  
an argument it's going to be a skill

1380  
00:51:19,579 --> 00:51:23,780  
that's useful in our personal world our

1381  
00:51:21,108 --> 00:51:25,190  
social world world of work and in the

1382  
00:51:23,780 --> 00:51:27,048  
wider questions about how the world

1383  
00:51:25,190 --> 00:51:28,639  
works they learn skills that can be

1384  
00:51:27,048 --> 00:51:30,349  
transferred to many different situations

1385  
00:51:28,639 --> 00:51:31,759  
and contexts and students who do

1386  
00:51:30,349 --> 00:51:33,740  
philosophy and ethics can acquire these

1387  
00:51:31,760 --> 00:51:35,778  
skills and become thinkers who recognize

1388  
00:51:33,739 --> 00:51:37,368  
and reflect critically on issues in the

1389  
00:51:35,778 --> 00:51:40,010  
life of their own and others experiences

1390  
00:51:37,369 --> 00:51:42,260  
so pseudoscience an education this is

1391  
00:51:40,010 --> 00:51:44,900  
probably closer to the end of what I do

1392  
00:51:42,260 --> 00:51:46,700  
in terms of what I've discovered through

1393  
00:51:44,900 --> 00:51:48,470  
blogging pseudo science and education

1394  
00:51:46,699 --> 00:51:50,419  
has cropped up again and again and those

1395  
00:51:48,469 --> 00:51:52,519  
of you work in an industry where you

1396  
00:51:50,420 --> 00:51:53,750  
have pd days or where someone comes and

1397

00:51:52,519 --> 00:51:55,788  
says right we're going to figure out the

1398  
00:51:53,750 --> 00:51:58,099  
personality of everybody here we're

1399  
00:51:55,789 --> 00:52:00,500  
going to do a lovely chart or four boxes

1400  
00:51:58,099 --> 00:52:01,970  
red green blue yellow and we're going to

1401  
00:52:00,500 --> 00:52:03,349  
figure out where your personality fits

1402  
00:52:01,969 --> 00:52:04,848  
into it and whether or not you're a team

1403  
00:52:03,349 --> 00:52:06,500  
player and who they're everyone like I

1404  
00:52:04,849 --> 00:52:07,338  
where you happen so yeah and eventually

1405  
00:52:06,500 --> 00:52:09,260  
you're just sitting there saying you

1406  
00:52:07,338 --> 00:52:11,028  
know I really could have just spent the

1407  
00:52:09,260 --> 00:52:13,220  
whole afternoon playing solitaire and

1408  
00:52:11,028 --> 00:52:15,440  
got more intellectual engagement out of

1409  
00:52:13,219 --> 00:52:17,358  
this it happens in the education

1410  
00:52:15,440 --> 00:52:18,588  
industry as well where people will say

1411  
00:52:17,358 --> 00:52:19,880

we're going to be doing this particular

1412

00:52:18,588 --> 00:52:21,798

activity it's going to be fabulous for

1413

00:52:19,880 --> 00:52:23,450

kids and you're saying yeah but where's

1414

00:52:21,798 --> 00:52:24,588

the underpinning reason for this what

1415

00:52:23,449 --> 00:52:27,129

makes you think that the kids are going

1416

00:52:24,588 --> 00:52:28,730

to get in fact what sort of

1417

00:52:27,130 --> 00:52:30,470

qualifications do you have an

1418

00:52:28,730 --> 00:52:32,480

educational psych anyway where is this

1419

00:52:30,469 --> 00:52:35,028

coming from a variety of packages and

1420

00:52:32,480 --> 00:52:35,289

programs come out one particular one

1421

00:52:35,028 --> 00:52:36,940

that

1422

00:52:35,289 --> 00:52:39,730

ice personally have issues with is Eddie

1423

00:52:36,940 --> 00:52:42,760

door is one of the big bug gears that

1424

00:52:39,730 --> 00:52:45,059

I've come up across door simply came up

1425

00:52:42,760 --> 00:52:48,850

across because there are a few bloggers

1426  
00:52:45,059 --> 00:52:50,409  
investigating it door is a program

1427  
00:52:48,849 --> 00:52:51,610  
started by man called winter fur door

1428  
00:52:50,409 --> 00:52:54,909  
who had a daughter who suffered from

1429  
00:52:51,610 --> 00:52:57,039  
dyslexia incredibly sad story very

1430  
00:52:54,909 --> 00:52:59,589  
traumatized by the fact that she had

1431  
00:52:57,039 --> 00:53:02,969  
dyslexia he decided to come up with a

1432  
00:52:59,590 --> 00:53:06,370  
cure it involves balancing and juggling

1433  
00:53:02,969 --> 00:53:08,409  
I'm standing on a board he makes a lot

1434  
00:53:06,369 --> 00:53:10,539  
of money out of this door recently

1435  
00:53:08,409 --> 00:53:12,219  
collapsed in Australia in fact I'm I had

1436  
00:53:10,539 --> 00:53:14,679  
the opportunity to go to a meeting day

1437  
00:53:12,219 --> 00:53:16,359  
for it collapse in Australia first and

1438  
00:53:14,679 --> 00:53:18,549  
we in Australia the bloggers of a

1439  
00:53:16,360 --> 00:53:20,410  
network of about 50 I was the one

1440  
00:53:18,550 --> 00:53:21,460  
Australian in the group and so on the

1441  
00:53:20,409 --> 00:53:23,589  
day that they were going to have an open

1442  
00:53:21,460 --> 00:53:24,670  
day at door I contacted the bloggers and

1443  
00:53:23,590 --> 00:53:26,320  
said I just went past the building

1444  
00:53:24,670 --> 00:53:27,639  
they're shut down I said can you find

1445  
00:53:26,320 --> 00:53:29,470  
them it's ok phone and phoned about and

1446  
00:53:27,639 --> 00:53:31,839  
i said hi what's happening said oh we've

1447  
00:53:29,469 --> 00:53:33,489  
gone into financial disarray nough said

1448  
00:53:31,840 --> 00:53:34,960  
ah what does this mean if this

1449  
00:53:33,489 --> 00:53:36,309  
particular things is ok these are the

1450  
00:53:34,960 --> 00:53:37,480  
things that they have to go through if

1451  
00:53:36,309 --> 00:53:39,940  
they're saying this particular thing

1452  
00:53:37,480 --> 00:53:42,250  
fabulous blogged it immediately that

1453  
00:53:39,940 --> 00:53:44,740  
then went over to the UK was blogged on

1454

00:53:42,250 --> 00:53:47,559  
their blogs and next thing you know Ben

1455  
00:53:44,739 --> 00:53:49,299  
Goldacre is coming out with a an article

1456  
00:53:47,559 --> 00:53:52,150  
in The Guardian saying these particular

1457  
00:53:49,300 --> 00:53:54,820  
bloggers broke the story door however is

1458  
00:53:52,150 --> 00:53:57,309  
a classic example of pseudoscience it is

1459  
00:53:54,820 --> 00:54:00,880  
now arising again as an independent

1460  
00:53:57,309 --> 00:54:02,380  
group without clinics as they used to

1461  
00:54:00,880 --> 00:54:04,360  
depend upon where they charge people

1462  
00:54:02,380 --> 00:54:06,460  
thousands of dollars just to come in for

1463  
00:54:04,360 --> 00:54:07,870  
a certain amount of time now it's an

1464  
00:54:06,460 --> 00:54:10,269  
independent program that can be sold out

1465  
00:54:07,869 --> 00:54:11,980  
to people which doesn't require people

1466  
00:54:10,269 --> 00:54:15,190  
standing over making sure the kids go

1467  
00:54:11,980 --> 00:54:17,050  
over the activities door won't stop many

1468  
00:54:15,190 --> 00:54:18,369

projects that go on there's a lot of

1469

00:54:17,050 --> 00:54:20,800

money to be made out of people who

1470

00:54:18,369 --> 00:54:22,599

believed strongly even at the points

1471

00:54:20,800 --> 00:54:25,450

that some of the bloggers set up an

1472

00:54:22,599 --> 00:54:27,429

alternative forum so the parents who

1473

00:54:25,449 --> 00:54:29,500

were engaged in door who are at a loss

1474

00:54:27,429 --> 00:54:31,659

as to how the door for ins are shutting

1475

00:54:29,500 --> 00:54:33,730

down because the company was gone even

1476

00:54:31,659 --> 00:54:36,489

when a new forum was started up didn't

1477

00:54:33,730 --> 00:54:38,139

matter how much we would point out the

1478

00:54:36,489 --> 00:54:39,909

scientific evidence in the end their

1479

00:54:38,139 --> 00:54:42,119

belief was stronger ever heard of focus

1480

00:54:39,909 --> 00:54:42,119

on the family

1481

00:54:42,929 --> 00:54:48,339

this no apologies the truth about life

1482

00:54:45,909 --> 00:54:50,019

love and sex this is the sort of lovely

1483  
00:54:48,340 --> 00:54:52,090  
little book that gets handed out to and

1484  
00:54:50,019 --> 00:54:54,070  
a certain teachers year 11 students

1485  
00:54:52,090 --> 00:54:57,370  
telling them that abstinence-only

1486  
00:54:54,070 --> 00:55:00,070  
education is the only way this ended up

1487  
00:54:57,369 --> 00:55:02,109  
in the news after parents found out no

1488  
00:55:00,070 --> 00:55:04,930  
apologies is a classic example books

1489  
00:55:02,110 --> 00:55:06,579  
which are being put out there there are

1490  
00:55:04,929 --> 00:55:08,289  
religious education teachers who would

1491  
00:55:06,579 --> 00:55:10,630  
look at that and just piss themselves

1492  
00:55:08,289 --> 00:55:12,099  
laughing of course it is absurd all the

1493  
00:55:10,630 --> 00:55:13,780  
research points out that abstinence only

1494  
00:55:12,099 --> 00:55:15,190  
education is a massive failure and in

1495  
00:55:13,780 --> 00:55:18,220  
fact is incredibly damaging to a

1496  
00:55:15,190 --> 00:55:20,769  
community and yet books are still being

1497  
00:55:18,219 --> 00:55:23,529  
published such as this one and are able

1498  
00:55:20,769 --> 00:55:25,739  
to get into schools this one however I

1499  
00:55:23,530 --> 00:55:27,910  
don't know if you know about Creelman

1500  
00:55:25,739 --> 00:55:30,309  
seeing this if you have anyone who does

1501  
00:55:27,909 --> 00:55:34,029  
two years still program that's still

1502  
00:55:30,309 --> 00:55:36,159  
going out it promotes creationism it's a

1503  
00:55:34,030 --> 00:55:38,230  
study guide the last paragraph on

1504  
00:55:36,159 --> 00:55:39,730  
teaching creationism in schools the

1505  
00:55:38,230 --> 00:55:41,409  
reason for the amazing string of

1506  
00:55:39,730 --> 00:55:43,000  
successes we had with our Paulo flights

1507  
00:55:41,409 --> 00:55:44,619  
to the moon was that we never tried to

1508  
00:55:43,000 --> 00:55:46,179  
overlook anything it's in the same

1509  
00:55:44,619 --> 00:55:47,949  
matter of scientific honesty that I

1510  
00:55:46,179 --> 00:55:49,089  
endorse the presentation alternative

1511

00:55:47,949 --> 00:55:53,349  
theories for the origin of the universe

1512  
00:55:49,090 --> 00:55:54,550  
life man in the science classroom it

1513  
00:55:53,349 --> 00:55:55,809  
would be an error to overlook the

1514  
00:55:54,550 --> 00:55:57,780  
possibility that the universe was

1515  
00:55:55,809 --> 00:56:00,369  
planned rather than happening by chance

1516  
00:55:57,780 --> 00:56:03,330  
adapted from an lamont 21 great

1517  
00:56:00,369 --> 00:56:05,889  
scientists who believe in the bible

1518  
00:56:03,329 --> 00:56:08,590  
career woman has about maybe 10 of these

1519  
00:56:05,889 --> 00:56:10,059  
out and he's been going since 2002 I

1520  
00:56:08,590 --> 00:56:11,890  
remember the first one that I picked up

1521  
00:56:10,059 --> 00:56:13,719  
in 2002 when I first started teaching

1522  
00:56:11,889 --> 00:56:16,299  
English and then I started realizing

1523  
00:56:13,719 --> 00:56:18,669  
that creelman has a very interesting

1524  
00:56:16,300 --> 00:56:20,920  
take on what education really should

1525  
00:56:18,670 --> 00:56:23,860

mean it's very subtle just little

1526

00:56:20,920 --> 00:56:26,590

banners down the side last pages at the

1527

00:56:23,860 --> 00:56:29,230

end who the publishers supporters are a

1528

00:56:26,590 --> 00:56:32,470

variety of Christian youth group camps

1529

00:56:29,230 --> 00:56:35,110

yeah I listened to sunshine FM now and

1530

00:56:32,469 --> 00:56:36,399

then they have nice music but I'm not

1531

00:56:35,110 --> 00:56:37,539

entirely certain if they really should

1532

00:56:36,400 --> 00:56:39,369

be behind this sort of thing quite

1533

00:56:37,539 --> 00:56:41,800

frankly the thing that amuses me the

1534

00:56:39,369 --> 00:56:43,869

most is that the human biology textbook

1535

00:56:41,800 --> 00:56:45,039

has to teach them evolution and yet

1536

00:56:43,869 --> 00:56:47,078

there they are still with their little

1537

00:56:45,039 --> 00:56:50,449

message at the front

1538

00:56:47,079 --> 00:56:54,140

this stuff's leak-proof I bought this

1539

00:56:50,449 --> 00:56:55,460

today this has been out since 2002 I was

1540  
00:56:54,139 --> 00:56:57,259  
wondering when anyone could have noticed

1541  
00:56:55,460 --> 00:56:59,420  
that I've been sort of noticing it being

1542  
00:56:57,259 --> 00:57:02,420  
on a variety of booklets from a variety

1543  
00:56:59,420 --> 00:57:05,568  
of schools yeah this is creelman his

1544  
00:57:02,420 --> 00:57:07,190  
officers let me see they're out there

1545  
00:57:05,568 --> 00:57:09,170  
this is well known that's just two

1546  
00:57:07,190 --> 00:57:11,690  
examples of pseudoscience the overlap

1547  
00:57:09,170 --> 00:57:13,278  
between atheism and skepticism and quite

1548  
00:57:11,690 --> 00:57:15,650  
frankly as far as I'm concerned it's an

1549  
00:57:13,278 --> 00:57:17,599  
example of how education does deserve a

1550  
00:57:15,650 --> 00:57:19,548  
good keen eye because you never know

1551  
00:57:17,599 --> 00:57:21,588  
what's going to be up there probably my

1552  
00:57:19,548 --> 00:57:22,909  
best suggestion for anyone who may not

1553  
00:57:21,588 --> 00:57:24,558  
be a teacher and yet is still interest

1554  
00:57:22,909 --> 00:57:26,449  
in the education and future is get

1555  
00:57:24,559 --> 00:57:29,569  
involved with your schools turn up to

1556  
00:57:26,449 --> 00:57:31,879  
parent teacher open days is it possible

1557  
00:57:29,568 --> 00:57:33,528  
for religious schools to have open

1558  
00:57:31,880 --> 00:57:35,900  
minded broad discussions on philosophy

1559  
00:57:33,528 --> 00:57:37,219  
and ethics which does require looking at

1560  
00:57:35,900 --> 00:57:39,559  
a variety of subjects which may not

1561  
00:57:37,219 --> 00:57:41,149  
agree with the score yes it is possible

1562  
00:57:39,559 --> 00:57:42,559  
for a school to have this it is possible

1563  
00:57:41,150 --> 00:57:44,329  
for teachers to be open-minded enough

1564  
00:57:42,559 --> 00:57:47,329  
even if they happen to have a particular

1565  
00:57:44,329 --> 00:57:50,150  
religious background maybe there aren't

1566  
00:57:47,329 --> 00:57:53,318  
as many as there should be better be

1567  
00:57:50,150 --> 00:57:53,318  
wonderful we could encourage them

1568

00:58:06,349 --> 00:58:10,739  
astronomy cast it takes a fact space

1569  
00:58:08,670 --> 00:58:12,480  
journey through the cosmos as it offers

1570  
00:58:10,739 --> 00:58:15,149  
listeners weekly discussions on

1571  
00:58:12,480 --> 00:58:18,059  
astronomical topics ranging from planets

1572  
00:58:15,150 --> 00:58:20,369  
to cosmology hosted by Fraser Cain of

1573  
00:58:18,059 --> 00:58:21,360  
Universe Today and myself dr. Pamela

1574  
00:58:20,369 --> 00:58:24,029  
gave southern illinois university

1575  
00:58:21,360 --> 00:58:25,920  
edwardsville this show brings the

1576  
00:58:24,030 --> 00:58:28,350  
questions of an avid astronomy lover

1577  
00:58:25,920 --> 00:58:30,450  
directly to an astronomer together

1578  
00:58:28,349 --> 00:58:31,980  
Fraser and I explore what is known and

1579  
00:58:30,449 --> 00:58:34,739  
being discovered about the universe

1580  
00:58:31,980 --> 00:58:36,840  
around us join us each week as we take a

1581  
00:58:34,739 --> 00:58:40,369  
fact space journey through the cosmos at

1582  
00:58:36,840 --> 00:58:40,370

astronomy cast calm

1583

00:58:52,380 --> 00:58:57,460

thanks for joining me for the skeptic

1584

00:58:55,090 --> 00:59:00,910

zone our full episode is back next week

1585

00:58:57,460 --> 00:59:02,880

with Stefan of course dr. Richie reports

1586

00:59:00,909 --> 00:59:06,399

a grain of salt in the think tank and

1587

00:59:02,880 --> 00:59:10,930

before then why not go to our site at ww

1588

00:59:06,400 --> 00:59:13,300

skeptic zone TV scroll down and click on

1589

00:59:10,929 --> 00:59:15,219

the t-shirt icon you can buy skeptics

1590

00:59:13,300 --> 00:59:18,000

own t-shirts cups and all sorts of other

1591

00:59:15,219 --> 00:59:20,289

things just the thing to wear to Tam

1592

00:59:18,000 --> 00:59:26,349

until next week this is Richard Saunders

1593

00:59:20,289 --> 00:59:28,750

signing off from Sydney Australia you've

1594

00:59:26,349 --> 00:59:33,400

been listening to the skeptic zone visit

1595

00:59:28,750 --> 00:59:35,829

our website at wwc a petting zoo TV for

1596

00:59:33,400 --> 00:59:38,490

comments contacts and extra video

1597  
00:59:35,829 --> 00:59:38,489  
reports

1598  
00:59:38,780 --> 00:59:41,780  
skits

1599  
00:59:49,760 --> 00:59:51,790  
Oh

1600  
00:59:52,519 --> 00:59:55,150  
did you

1601  
00:59:56,809 --> 00:59:58,869  
you