



1
00:00:00,566 --> 00:00:06,566
[music playing]

2
00:00:16,233 --> 00:00:18,233
[applause]

3
00:00:18,233 --> 00:00:20,533
- SO WELCOME
TO THE 75TH ANNIVERSARY

4
00:00:20,533 --> 00:00:22,866
OF NASA AMES RESEARCH CENTER

5
00:00:22,866 --> 00:00:27,366
AND TO THE DIRECTOR'S COLLOQUIUM
SUMMER SERIES.

6
00:00:27,366 --> 00:00:29,433
KNOWLEDGE IS POWER.

7
00:00:29,433 --> 00:00:32,066
KNOWLEDGE IS FREEDOM.

8
00:00:32,066 --> 00:00:35,233
THE ONLY THINGS
THAT YOU TRULY OWN

9
00:00:35,233 --> 00:00:37,133
IS WHAT YOU LEARN

10
00:00:37,133 --> 00:00:39,833
AND YOUR RELATIONSHIPS
WITH THE WORLD.

11
00:00:39,833 --> 00:00:43,866
SO KNOWLEDGE IS
THE GREATEST GIFT YOU CAN GIVE

12

00:00:43,866 --> 00:00:46,100
AND RECEIVE.

13
00:00:46,100 --> 00:00:49,833
THE KHAN ACADEMY
MAKES KNOWLEDGE ACCESSIBLE

14
00:00:49,833 --> 00:00:51,833
TO EVERYONE,

15
00:00:51,833 --> 00:00:55,433
KNOWLEDGE THAT WILL CHANGE
THEIR LIVES

16
00:00:55,433 --> 00:00:59,633
AND THE WORLD.

17
00:00:59,633 --> 00:01:02,133
TODAY'S TALK IS ENTITLED

18
00:01:02,133 --> 00:01:06,166
"KHAN ACADEMY:
EDUCATION REIMAGINED"

19
00:01:06,166 --> 00:01:10,366
AND WILL BE PRESENTED
BY SALMAN KHAN.

20
00:01:10,366 --> 00:01:12,800
MR. KHAN IS THE FOUNDER
OF THE KHAN ACADEMY,

21
00:01:12,800 --> 00:01:15,300
A NONPROFIT ORGANIZATION
WITH A MISSION

22
00:01:15,300 --> 00:01:19,100
OF PROVIDING FREE,
HIGH-QUALITY EDUCATION

23

00:01:19,100 --> 00:01:23,533

FOR ANYONE

ANYWHERE IN THE WORLD.

24

00:01:23,533 --> 00:01:25,066

HE GRADUATED FROM MIT

25

00:01:25,066 --> 00:01:27,400

WITH TWO

BACHELOR OF SCIENCE DEGREES--

26

00:01:27,400 --> 00:01:30,666

ONE IN MATHEMATICS AND ONE

IN ELECTRICAL ENGINEERING

27

00:01:30,666 --> 00:01:33,533

AND COMPUTER SCIENCE

28

00:01:33,533 --> 00:01:38,233

AND A MASTER'S OF SCIENCE DEGREE

IN ELECTRICAL ENGINEERING.

29

00:01:38,233 --> 00:01:42,633

HE ALSO HOLDS A MASTER'S

OF BUSINESS ADMINISTRATION

30

00:01:42,633 --> 00:01:44,800

FROM HARVARD BUSINESS SCHOOL.

31

00:01:44,800 --> 00:01:49,366

FOR HIS WORK, SALMAN HAS

RECEIVED MANY PRESTIGIOUS AWARDS

32

00:01:49,366 --> 00:01:51,100

AND HONORS.

33

00:01:51,100 --> 00:01:54,133

PLEASE JOIN ME

IN WELCOMING SALMAN KHAN.

34

00:01:54,133 --> 00:01:57,133

[applause]

35

00:01:59,700 --> 00:02:02,200

- THANKS SO MUCH.

36

00:02:04,166 --> 00:02:06,000

SO VERY EXCITING

TO BE HERE.

37

00:02:06,000 --> 00:02:09,733

I ALWAYS LIKE TO START

THESE CONVERSATIONS

38

00:02:09,733 --> 00:02:11,500

REALLY JUST GETTING A SENSE

OF WHO'S IN THE ROOM.

39

00:02:11,500 --> 00:02:14,633

HOW MANY OF Y'ALL ARE--

40

00:02:14,633 --> 00:02:16,633

ARE USERS OF KHAN ACADEMY

IN SOME--

41

00:02:16,633 --> 00:02:18,800

OH, GOOD. YES.

HOW MANY OF Y'ALL--

42

00:02:18,800 --> 00:02:21,100

HOW MANY OF THOSE

ARE EXISTING STUDENTS?

43

00:02:21,100 --> 00:02:23,933

OKAY, HOW MANY OF Y'ALL

ARE IN HIGH SCHOOL?

44

00:02:23,933 --> 00:02:25,733

OKAY.
OH, THERE'S A GOOD CROWD HERE.

45
00:02:25,733 --> 00:02:28,333
HOW MANY OF Y'ALL
ARE IN COLLEGE?

46
00:02:28,333 --> 00:02:30,666
OH, WOW.
GRAD SCHOOL?

47
00:02:30,666 --> 00:02:32,633
A FEW. OKAY, VERY--
THIS IS--

48
00:02:32,633 --> 00:02:34,933
MIDDLE OR ELEMENTARY, ANY?
[laughter]

49
00:02:34,933 --> 00:02:37,300
OH, VERY GOOD. OH, YEAH.
OH, LOOK. OH, THERE.

50
00:02:37,300 --> 00:02:39,700
VERY GOOD, AND HOW MANY
OF Y'ALL ARE PARENTS WHO--

51
00:02:39,700 --> 00:02:41,366
OKAY.

52
00:02:41,366 --> 00:02:44,200
AND HOW MANY OF YOU HAVE NO IDEA
WHAT KHAN ACADEMY IS?

53
00:02:44,200 --> 00:02:45,833
GOOD. I'M GONNA BE
TALKING TO YOU TODAY.

54
00:02:45,833 --> 00:02:47,900
[laughter]

55

00:02:47,900 --> 00:02:50,800

SO AS--

56

00:02:50,800 --> 00:02:53,100

IT SOUNDS LIKE MOST OF Y'ALL
ARE PROBABLY FAMILIAR.

57

00:02:53,100 --> 00:02:55,266

KHAN ACADEMY
IS OFTEN ASSOCIATED

58

00:02:55,266 --> 00:02:57,766

WITH A COLLECTION OF VIDEOS
THAT I STARTED MAKING,

59

00:02:57,766 --> 00:03:00,533

NOW, YOU KNOW,
A DECENT NUMBER OF YEARS AGO.

60

00:03:00,533 --> 00:03:01,966

BUT AS WE'RE GONNA TALK ABOUT
OVER THE COURSE

61

00:03:01,966 --> 00:03:04,166

OF THIS CONVERSATION IS

62

00:03:04,166 --> 00:03:06,300

IT'S NOW MUCH, MUCH, MUCH MORE
THAN JUST VIDEOS.

63

00:03:06,300 --> 00:03:08,766

IN FACT, IN MY MIND,
THE VIDEOS ARE A SMALL PART

64

00:03:08,766 --> 00:03:11,800

OF WHAT KHAN ACADEMY IS
AND WHAT IT'S GOING TO BE.

65

00:03:11,800 --> 00:03:13,433

BUT TO GET EVERYONE
ON THE SAME PAGE,

66

00:03:13,433 --> 00:03:15,200

AND ESPECIALLY FOR THE GENTLEMAN
WHO DOESN'T--ISN'T FAMILIAR

67

00:03:15,200 --> 00:03:17,666

WITH KHAN ACADEMY,
I WILL SHOW A QUICK MONTAGE

68

00:03:17,666 --> 00:03:20,666

OF VIDEOS.

69

00:03:20,666 --> 00:03:23,633

ALL THESE INTERACTIONS
ARE JUST DUE TO THE GRAVITY.

70

00:03:23,633 --> 00:03:26,366

- THIS IS AN AGE
RIGHT AFTER ISAAC NEWTON--

71

00:03:26,366 --> 00:03:28,533

- I'M TOLD THE HUMIDITY
MAKES IT FEEL HOTTER.

72

00:03:28,533 --> 00:03:29,666

WHY IS THIS?

73

00:03:29,666 --> 00:03:31,333

- EXCELLENT QUESTION, LEBRON.

74

00:03:31,333 --> 00:03:33,700

- AND YOU CAN JUST SEE
THE PLEASURE HE HAD.

75

00:03:33,700 --> 00:03:36,433

- CAN YOU DETERMINE WHICH
LIGHT BULB IS BEING SWITCHED?

76

00:03:36,433 --> 00:03:38,766

- THINGS ACTUALLY CAN
INTERBREED,

77

00:03:38,766 --> 00:03:40,100

ALTHOUGH FOR THESE TWO
IN PARTICULAR,

78

00:03:40,100 --> 00:03:41,233

IT SEEMS LIKE THE MECHANICS
WOULD GET KIND OF--

79

00:03:41,233 --> 00:03:42,466

[laughter]

80

00:03:42,466 --> 00:03:43,933

- KEEP PLAYING AROUND
WITH THESE NUMBERS

81

00:03:43,933 --> 00:03:45,833

AND SEE WHAT KIND OF COLORS
I CAN COME UP WITH.

82

00:03:45,833 --> 00:03:49,366

- IF THIS DOES NOT
BLOW YOUR MIND,

83

00:03:49,366 --> 00:03:51,233

THEN YOU HAVE NO EMOTION.

84

00:03:51,233 --> 00:03:54,933

[laughter]

85

00:03:54,933 --> 00:03:58,600

- HAD A FEELING THIS CROWD WOULD
APPRECIATE EULER'S IDENTITY.

86

00:03:58,600 --> 00:04:01,900

BUT AS I MENTIONED,
IT'S NOT JUST VIDEOS.

87
00:04:01,900 --> 00:04:06,200
THIS RIGHT OVER HERE, THIS IS
OUR COMPUTER SCIENCE PLATFORM.

88
00:04:06,200 --> 00:04:08,933
IT'S A PLACE WHERE YOU CAN GO,
YOU CAN CODE.

89
00:04:08,933 --> 00:04:11,166
AND OUR WHOLE GOAL HERE IS,
YOU KNOW,

90
00:04:11,166 --> 00:04:12,933
FOR ALL OF US
WHO HAVE EVER PROGRAMMED,

91
00:04:12,933 --> 00:04:15,166
WE ALWAYS GOT INTO IT SAYING,
"HEY, I WANT TO CREATE A GAME.

92
00:04:15,166 --> 00:04:17,700
I WANT TO CREATE A SCREENSAVER.
I WANT TO CREATE AN ANIMATION."

93
00:04:17,700 --> 00:04:19,600
AND THEN WE JUST LEARNED
WHAT IT'D TAKE TO BUILD

94
00:04:19,600 --> 00:04:21,333
THAT ANIMATION, WHICH ISN'T
HOW IT'S TRADITIONALLY TAUGHT.

95
00:04:21,333 --> 00:04:22,566
TRADITIONALLY, IT'S LIKE,

96
00:04:22,566 --> 00:04:23,933
"HEY, THIS IS A FOR LOOP.

THIS IS A VARIABLE."

97

00:04:23,933 --> 00:04:26,766
AND SO WE REALLY WANTED TO GIVE
THAT CREATIVE SPIRIT

98

00:04:26,766 --> 00:04:30,166
THAT I THINK ALL PROGRAMMERS
ORIGINALLY GOT INTO IT FOR

99

00:04:30,166 --> 00:04:32,400
TO THE LEARNER,
AND THEY CAN HAVE PROFILES,

100

00:04:32,400 --> 00:04:35,733
AND THEY CAN BUILD,
AND THEY CAN GET PEER FEEDBACK

101

00:04:35,733 --> 00:04:37,466
BASED ON
WHAT THEY'RE DOING.

102

00:04:37,466 --> 00:04:39,866
THIS IS WHAT MOST OF OUR TEAM
IS FOCUSED ON.

103

00:04:39,866 --> 00:04:42,066
I GUESS YOU COULD CALL THIS
THE MEAT OF KHAN ACADEMY.

104

00:04:42,066 --> 00:04:44,533
IT'S OUR INTERACTIVE
MATH EXPERIENCE.

105

00:04:44,533 --> 00:04:47,633
AND THE IDEA HERE IS
A STUDENT CAN GO, LOG ON,

106

00:04:47,633 --> 00:04:49,466
THEY'LL TAKE A DIAGNOSTIC,

AND ALL THIS IS FREE.

107

00:04:49,466 --> 00:04:51,266

IT'S ALL AVAILABLE.

108

00:04:51,266 --> 00:04:52,833

AND BASED ON HOW
THE STUDENT'S PERFORMING,

109

00:04:52,833 --> 00:04:54,866

IT'LL BUILD A STATISTICAL MODEL
OF WHAT THEY KNOW

110

00:04:54,866 --> 00:04:56,900

AND DON'T KNOW,
AND THEN BASED ON THAT,

111

00:04:56,900 --> 00:04:59,500

GUIDE THEM THROUGH EXERCISES,
GIVE THEM FEEDBACK.

112

00:04:59,500 --> 00:05:01,400

IF THEY HAVE A TEACHER
OR A PARENT,

113

00:05:01,400 --> 00:05:03,033

IT CAN GIVE THE TEACHER
OR THE PARENT REPORTS

114

00:05:03,033 --> 00:05:04,500

ON HOW THEY'RE DOING,

115

00:05:04,500 --> 00:05:06,233

AND OBVIOUSLY, A WHOLE SERIES
OF GAME MECHANICS

116

00:05:06,233 --> 00:05:09,633

TO HOPEFULLY KEEP THE STUDENTS
AS MOTIVATED AS POSSIBLE.

117

00:05:09,633 --> 00:05:12,366

SO THIS IS WHERE WE ARE
RIGHT NOW.

118

00:05:12,366 --> 00:05:15,566

KHAN ACADEMY IS BEING USED
IN SOME WAY, SHAPE, OR FORM

119

00:05:15,566 --> 00:05:18,100

IN ALMOST EVERY COUNTRY
ON THE PLANET.

120

00:05:18,100 --> 00:05:21,200

OVER 300,000 EDUCATORS

121

00:05:21,200 --> 00:05:23,833

HAVE REGISTERED
AND ARE USING IT IN SOME WAY.

122

00:05:23,833 --> 00:05:25,866

10 MILLION UNIQUE STUDENTS
EVERY MONTH

123

00:05:25,866 --> 00:05:27,933

ARE USING THE SITE.

124

00:05:27,933 --> 00:05:29,666

AND THEY'VE DONE
OVER 2 BILLION EXERCISES,

125

00:05:29,666 --> 00:05:32,633

AND YOU SAW A LITTLE SAMPLE OF
WHAT THOSE EXERCISES LOOK LIKE.

126

00:05:32,633 --> 00:05:35,066

BUT BEFORE KIND OF GOING MORE
INTO WHERE WERE GOING,

127

00:05:35,066 --> 00:05:37,066

I WILL TAKE A STEP BACK,
AND I CAN SENSE

128
00:05:37,066 --> 00:05:39,100
THAT MANY OF YOU ALL
ARE FAMILIAR WITH THIS.

129
00:05:39,100 --> 00:05:41,366
BUT I'LL GIVE
A LITTLE BIT OF TEXTURE

130
00:05:41,366 --> 00:05:42,733
OF HOW ALL OF THIS
GOT STARTED.

131
00:05:42,733 --> 00:05:44,533
AND IT'S EXCITING
TO SPEAK HERE,

132
00:05:44,533 --> 00:05:46,966
BECAUSE IT ALL GOT STARTED,
FRANKLY, NOT TOO FAR FROM HERE.

133
00:05:46,966 --> 00:05:50,700
IF YOU REWIND
TO SUMMER OF 2004,

134
00:05:50,700 --> 00:05:52,733
SO ALMOST EXACTLY
TEN YEARS AGO,

135
00:05:52,733 --> 00:05:55,100
I WAS A YEAR
OUT OF BUSINESS SCHOOL.

136
00:05:55,100 --> 00:05:57,033
I HAD JUST GOTTEN MARRIED,

137
00:05:57,033 --> 00:05:59,600
AND I WAS BASED IN BOSTON

AT THE TIME.

138

00:05:59,600 --> 00:06:01,666

AND I HAD A BUNCH OF FAMILY
VISITING ME FROM NEW ORLEANS.

139

00:06:01,666 --> 00:06:03,766

THAT'S WHERE I WAS
BORN AND RAISED, AS WELL.

140

00:06:03,766 --> 00:06:05,533

AND IT JUST CAME
OUT OF CONVERSATION

141

00:06:05,533 --> 00:06:06,933

THAT ONE OF MY COUSINS,
NADIA--

142

00:06:06,933 --> 00:06:10,066

HER MOM TOLD ME THAT NADIA
WAS HAVING TROUBLE WITH MATH.

143

00:06:10,066 --> 00:06:12,366

AND SO WHEN NADIA
CAME INTO THE ROOM,

144

00:06:12,366 --> 00:06:13,966

I ASKED HER,
"WHAT'S GOING ON?"

145

00:06:13,966 --> 00:06:15,200

SHE SAID, "WELL, I TOOK A--

146

00:06:15,200 --> 00:06:16,466

YOU KNOW, I'VE BEEN
A DECENT STUDENT.

147

00:06:16,466 --> 00:06:18,300

I'VE BEEN GETTING
B-PLUSES, A-MINUSES."

148

00:06:18,300 --> 00:06:21,500

BUT THERE WAS A PLACEMENT EXAM
AT THE END OF SIXTH GRADE,

149

00:06:21,500 --> 00:06:23,466

AND IT HAD UNIT CONVERSION
ON IT--

150

00:06:23,466 --> 00:06:25,366

YOU KNOW, OUNCES TO GALLONS,
MILES TO KILOMETERS--

151

00:06:25,366 --> 00:06:27,033

AND ACCORDING TO NADIA,
SHE JUST, YOU KNOW,

152

00:06:27,033 --> 00:06:28,600

COULDN'T PROCESS IT.

153

00:06:28,600 --> 00:06:30,633

SHE'S JUST NOT GOOD
AT UNIT CONVERSION.

154

00:06:30,633 --> 00:06:31,633

AND SO I TOLD HER, "LOOK,

155

00:06:31,633 --> 00:06:33,400

I THINK YOU COULD EASILY
OVERCOME THAT."

156

00:06:33,400 --> 00:06:35,533

I THINK SHE THOUGHT IT WAS
KIND OF AN EMPTY PEP TALK.

157

00:06:35,533 --> 00:06:37,833

SO I SAID, "NO, NO, SERIOUSLY.
WELL, IF YOU'RE UP FOR IT,

158

00:06:37,833 --> 00:06:39,233
HOW ABOUT WHEN YOU GO BACK
TO NEW ORLEANS,

159
00:06:39,233 --> 00:06:41,300
WE'LL GET ON THE PHONE
AND WHATEVER ELSE WE CAN USE

160
00:06:41,300 --> 00:06:44,266
AND I'LL TUTOR YOU?"
AND SHE WAS UP FOR IT.

161
00:06:44,266 --> 00:06:48,866
SO SHE WENT BACK,
AND SO STARTING AUGUST OF 2004,

162
00:06:48,866 --> 00:06:50,533
EVERY DAY AFTER SCHOOL
FOR HER,

163
00:06:50,533 --> 00:06:52,866
EVERY DAY AFTER WORK FOR ME,
GOT ON THE PHONE.

164
00:06:52,866 --> 00:06:56,166
WE EVENTUALLY FIGURED OUT A WAY
TO SEE EACH OTHER'S SCRAWLS ON--

165
00:06:56,166 --> 00:06:59,133
YAHOO! INSTANT MESSENGER HAD
A LITTLE DOODLE FUNCTIONALITY

166
00:06:59,133 --> 00:07:00,666
AT THE TIME.

167
00:07:00,666 --> 00:07:02,333
AND SO WE JUST
STARTED WORKING,

168
00:07:02,333 --> 00:07:04,400

AND, YOU KNOW,
THE FIRST MONTH WAS TOUGH.

169
00:07:04,400 --> 00:07:06,300
SHE ESSENTIALLY
HAD PSYCHED HERSELF OUT.

170
00:07:06,300 --> 00:07:09,166
SHE HAD CONVINCED HERSELF THAT
SHE'S JUST NOT GOOD AT MATH.

171
00:07:09,166 --> 00:07:11,566
BUT SLOWLY BUT SURELY,
SHE STARTED TO ENGAGE,

172
00:07:11,566 --> 00:07:14,700
SHE STARTED TO REALLY KIND OF
OWN AND TACKLE THE PROBLEMS.

173
00:07:14,700 --> 00:07:16,400
AND THEN SOMETHING CLICKED,

174
00:07:16,400 --> 00:07:18,266
AND SHE NOT ONLY GOT
UNIT CONVERSION,

175
00:07:18,266 --> 00:07:20,400
SHE STARTED TO ACTUALLY GET
A LITTLE BIT AHEAD OF THE CURVE

176
00:07:20,400 --> 00:07:22,766
OF WHERE YOU WOULD EXPECT
A SEVENTH GRADE STUDENT TO BE.

177
00:07:22,766 --> 00:07:24,600
AND AT THAT POINT,
I BECAME WHAT I CALL

178
00:07:24,600 --> 00:07:28,100
A TIGER COUSIN.

[laughter]

179

00:07:28,100 --> 00:07:30,633
SO I CALLED UP HER SCHOOL,
AND I SAID,

180

00:07:30,633 --> 00:07:32,233
"YOU KNOW, I REALLY THINK
NADIA RAHMAN

181

00:07:32,233 --> 00:07:34,666
SHOULD RETAKE THAT
PLACEMENT EXAM FROM LAST YEAR."

182

00:07:34,666 --> 00:07:37,466
THEY SAID, "WHO ARE YOU?"
[laughter]

183

00:07:37,466 --> 00:07:40,300
I POINTED OUT THAT
I'M HER COUSIN.

184

00:07:40,300 --> 00:07:42,733
AND SOMEWHAT SURPRISING,

185

00:07:42,733 --> 00:07:45,033
THEY DID ALLOW HER TO RETAKE
THE PLACEMENT EXAM,

186

00:07:45,033 --> 00:07:47,300
AND SHE WENT FROM BEING TRACKED
IN THE REMEDIAL CLASS

187

00:07:47,300 --> 00:07:50,866
TO NOT JUST THE AVERAGE CLASS,
BUT INTO THE ADVANCED CLASS.

188

00:07:50,866 --> 00:07:53,633
AND, YOU KNOW, AND I COULD
GO ON AND ON ABOUT NADIA.

189

00:07:53,633 --> 00:07:56,300

I MEAN, THAT SAME NADIA, JUST
TO FAST-FORWARD A LITTLE BIT,

190

00:07:56,300 --> 00:07:58,033

WHO, YOU KNOW,
AT AGE 12,

191

00:07:58,033 --> 00:07:59,833

THOUGHT SHE COULDN'T GET
UNIT CONVERSION,

192

00:07:59,833 --> 00:08:02,100

BY AGE 14,
WAS TAKING CALCULUS

193

00:08:02,100 --> 00:08:03,866

AT THE UNIVERSITY
OF NEW ORLEANS.

194

00:08:03,866 --> 00:08:04,966

AND THAT'S SOMETHING
THAT WE JUST--

195

00:08:04,966 --> 00:08:06,900

YOU KNOW, AND I'VE SEEN
MORE AND MORE

196

00:08:06,900 --> 00:08:08,633

THE MORE THAT KHAN ACADEMY
HAS GROWN.

197

00:08:08,633 --> 00:08:11,966

BUT AS--REWIND BACK
TO FALL OF 2004,

198

00:08:11,966 --> 00:08:13,400

I WAS EXCITED.

199

00:08:13,400 --> 00:08:16,266

IT WAS THIS KIND OF VERY SMALL
THING THAT I DID WITH MY COUSIN.

200

00:08:16,266 --> 00:08:18,000

IT SEEMED TO REALLY
HELP HER OUT,

201

00:08:18,000 --> 00:08:20,566

SO I STARTED WORKING
WITH HER YOUNGER BROTHERS.

202

00:08:20,566 --> 00:08:23,300

THEN A FEW THINGS HAPPENED
OVER THE NEXT TWO YEARS.

203

00:08:23,300 --> 00:08:25,100

THE FIRST IS I WAS AN ANALYST

204

00:08:25,100 --> 00:08:28,933

AT A SMALL INVESTMENT FIRM,
AND--

205

00:08:28,933 --> 00:08:32,400

VERY SMALL, IT WAS ME,
MY BOSS, AND HIS DOG, AND--

206

00:08:32,400 --> 00:08:34,633

[laughter]

THE DOG WAS THE CHIEF ECONOMIST.

207

00:08:34,633 --> 00:08:36,766

AND WE--

[laughter]

208

00:08:36,766 --> 00:08:38,366

WE ACTUALLY HAD CARDS PRINTED.

209

00:08:38,366 --> 00:08:40,266

AND HIS WIFE--

210

00:08:40,266 --> 00:08:42,000

MY BOSS' WIFE, NOT THE--

211

00:08:42,000 --> 00:08:45,266

BECAME A PROFESSOR
AT STANFORD LAW SCHOOL.

212

00:08:45,266 --> 00:08:48,200

SO WE MOVED THE FIRM
OUT HERE.

213

00:08:48,200 --> 00:08:52,400

AND SO I WAS NOW BASED
OUT HERE

214

00:08:52,400 --> 00:08:54,166

IN PALO ALTO
AND THEN MOVED TO MOUNTAIN VIEW.

215

00:08:54,166 --> 00:08:56,066

AND THE OTHER THING
THAT HAPPENED

216

00:08:56,066 --> 00:08:58,300

IS WORD GOT AROUND IN THE FAMILY
THAT FREE TUTORING WAS GOING ON.

217

00:08:58,300 --> 00:09:00,300

[laughter]

218

00:09:00,300 --> 00:09:01,966

SO I WAS WORKING
EVERY DAY AFTER WORK

219

00:09:01,966 --> 00:09:04,766

WITH ABOUT 10 OR 15 COUSINS,
FAMILY FRIENDS

220

00:09:04,766 --> 00:09:06,833

ALL OVER THE COUNTRY.

221

00:09:06,833 --> 00:09:08,900

AND TO HELP SCALE THAT UP
A LITTLE BIT,

222

00:09:08,900 --> 00:09:10,433

YOU KNOW,
I WAS WORKING WITH--

223

00:09:10,433 --> 00:09:12,133

EVEN WHEN I WAS WORKING
WITH NADIA, BUT THEN ESPECIALLY

224

00:09:12,133 --> 00:09:14,033

AS I STARTED WORKING
WITH MORE AND MORE COUSINS,

225

00:09:14,033 --> 00:09:16,600

I SAW THAT EVEN THE ONES
THAT WERE PRETTY GOOD STUDENTS,

226

00:09:16,600 --> 00:09:18,933

THEY ALL HAD GAPS
IN THEIR KNOWLEDGE.

227

00:09:18,933 --> 00:09:20,800

AND I WANTED THEM
TO BE ABLE TO PRACTICE MORE,

228

00:09:20,800 --> 00:09:22,866

AND FOR ME, AS THEIR TUTOR,
TO SEE WHAT THEY KNEW

229

00:09:22,866 --> 00:09:24,300

AND WHAT THEY DIDN'T KNOW,

230

00:09:24,300 --> 00:09:27,500

SO I STARTED WRITING A LITTLE--
A QUIZZING PIECE OF SOFTWARE,

231

00:09:27,500 --> 00:09:29,733

A WEB-BASED THING THAT WOULD
GENERATE PROBLEMS FOR THEM.

232

00:09:29,733 --> 00:09:31,133

AS THEY MASTERED
ONE CONCEPT,

233

00:09:31,133 --> 00:09:33,066

IT WOULD MOVE THEM ON
TO THE NEXT ONE.

234

00:09:33,066 --> 00:09:35,233

AND THAT WAS ACTUALLY
THE GENESIS OF KHAN ACADEMY.

235

00:09:35,233 --> 00:09:36,400

IT WAS LITERALLY--
I REMEMBER THE DAY,

236

00:09:36,400 --> 00:09:38,766

I WAS LIKE, "OH,
WHAT DO I CALL THIS THING?"

237

00:09:38,766 --> 00:09:40,700

AND I LOOKED FOR, LIKE,
FIVE OR SIX DOMAIN NAMES.

238

00:09:40,700 --> 00:09:41,866

COULDN'T--AND ALL OF THEM
WERE TAKEN.

239

00:09:41,866 --> 00:09:43,233

I'M LIKE,
"WHAT ABOUT KHAN ACADEMY?"

240

00:09:43,233 --> 00:09:45,433

AND IT WAS AVAILABLE.

241

00:09:45,433 --> 00:09:47,833

AND--BUT AT THAT TIME, IT HAD
NOTHING TO DO WITH VIDEOS.

242

00:09:47,833 --> 00:09:51,800

BUT THEN YOU FAST-FORWARD
TO FALL OF 2006,

243

00:09:51,800 --> 00:09:54,500

I WAS AT A DINNER PARTY
RIGHT HERE IN SAN MATEO,

244

00:09:54,500 --> 00:09:57,566

AND, YOU KNOW, I WAS
SHOWING THIS SOFTWARE OFF

245

00:09:57,566 --> 00:09:59,366

TO A BUNCH
OF MY FRIENDS.

246

00:09:59,366 --> 00:10:01,233

AND THEY ALL KNEW
I HAD THIS CRAZY PROJECT

247

00:10:01,233 --> 00:10:03,466

WITH MY COUSINS.

248

00:10:03,466 --> 00:10:05,700

AND THE HOST,
I GIVE HIM FULL CREDIT,

249

00:10:05,700 --> 00:10:07,266

ZULI RAMZAN,

250

00:10:07,266 --> 00:10:09,433

HE SAYS, "WELL, YOU KNOW, SAL,
THIS IS COOL AND EVERYTHING,

251

00:10:09,433 --> 00:10:12,366

BUT HOW ARE YOU ACTUALLY SCALING
UP YOUR ACTUAL TUTORIALS?"

252

00:10:12,366 --> 00:10:13,566

AND I SAID, "YOU KNOW,

253

00:10:13,566 --> 00:10:14,966

I'M ACTUALLY HAVING TROUBLE
WITH THAT."

254

00:10:14,966 --> 00:10:17,366

WHEN, YOU KNOW--WHAT I WAS ABLE
TO DO ONE-ON-ONE WITH NADIA,

255

00:10:17,366 --> 00:10:19,733

I CAN'T DO WHEN THERE'S
FIVE PEOPLE ON THE PHONE.

256

00:10:19,733 --> 00:10:21,766

OR SOMETIMES I'D COVER SOMETHING
WITH ONE COUSIN,

257

00:10:21,766 --> 00:10:23,166

AND THEN THE NEXT WEEK
I'M COVERING IT AGAIN

258

00:10:23,166 --> 00:10:24,666

WITH ANOTHER COUSIN,
AND I WISH SOMEHOW

259

00:10:24,666 --> 00:10:26,866

THAT THEY WERE THERE
FOR IT THE FIRST TIME.

260

00:10:26,866 --> 00:10:29,066

AND SO ZULI SAYS, "WELL, LOOK,
YOU KNOW, I'VE GOT AN IDEA.

261

00:10:29,066 --> 00:10:31,800
WHY DON'T YOU MAKE SOME
OF YOUR TUTORIALS AS VIDEOS

262
00:10:31,800 --> 00:10:34,900
AND UPLOAD 'EM ON TO YOUTUBE
FOR YOUR COUSINS?"

263
00:10:34,900 --> 00:10:38,233
AND I IMMEDIATELY SAID,
"NO, THAT'S A HORRIBLE IDEA.

264
00:10:38,233 --> 00:10:39,700
YOUTUBE IS FOR CATS
PLAYING PIANO."

265
00:10:39,700 --> 00:10:41,633
[laughter]

266
00:10:41,633 --> 00:10:44,633
"IT IS NOT
FOR SERIOUS MATHEMATICS."

267
00:10:44,633 --> 00:10:46,433
BUT I WENT HOME
THAT WEEKEND,

268
00:10:46,433 --> 00:10:48,966
GOT OVER THE IDEA
THAT IT WASN'T MY IDEA.

269
00:10:48,966 --> 00:10:51,366
AND I--
[laughter]

270
00:10:51,366 --> 00:10:53,800
AND I DECIDED
TO GIVE IT A SHOT.

271
00:10:53,800 --> 00:10:56,166

AND SO I MADE THOSE FIRST FEW
VIDEOS ON LEAST COMMON MULTIPLE,

272

00:10:56,166 --> 00:10:57,666

ADDING FRACTIONS
WITH UNLIKE DENOMIN--

273

00:10:57,666 --> 00:10:59,666

JUST TOPICS THAT I SAW
A LOT OF MY COUSINS

274

00:10:59,666 --> 00:11:01,633

WERE HAVING QUESTIONS ABOUT.

275

00:11:01,633 --> 00:11:04,133

AND I--YOU KNOW, AFTER I MADE
ABOUT 20 OR 30 OF 'EM

276

00:11:04,133 --> 00:11:05,933

OVER THE NEXT MONTH,
I STARTED TELLING MY COUSINS,

277

00:11:05,933 --> 00:11:08,300

"WELL, YOU KNOW, WHY DON'T YOU
WATCH THESE FOR REVIEW,

278

00:11:08,300 --> 00:11:10,766

AND THEN WHEN WE GET ON
THE PHONE, YOU CAN DIG DEEPER?

279

00:11:10,766 --> 00:11:12,466

AND THEN BASED ON THAT,
I CAN EVEN MAKE MORE VIDEOS

280

00:11:12,466 --> 00:11:14,100

BASED ON WHAT QUESTIONS
I'M GETTING."

281

00:11:14,100 --> 00:11:15,933

AND AFTER ABOUT A MONTH OF THEM,

I ASKED FOR THEIR FEEDBACK,

282

00:11:15,933 --> 00:11:18,633

AND THEY SOMEWHAT FAMOUSLY
AND BACKHANDEDLY TOLD ME

283

00:11:18,633 --> 00:11:20,733

THAT THEY LIKED ME BETTER
ON YOUTUBE THAN IN PERSON.

284

00:11:20,733 --> 00:11:23,666

[laughter]

285

00:11:23,666 --> 00:11:25,833

AND, YOU KNOW,
I THINK THAT--

286

00:11:25,833 --> 00:11:27,566

AND THAT IS TRUE,

287

00:11:27,566 --> 00:11:29,700

BUT I THINK IT BEARS--
IT'S WORTH PARSING

288

00:11:29,700 --> 00:11:31,666

WHAT THEY WERE SAYING
AND WHAT THEY WEREN'T SAYING.

289

00:11:31,666 --> 00:11:33,333

THEY WEREN'T SAYING
THAT THEY DIDN'T APPRECIATE

290

00:11:33,333 --> 00:11:35,533

HAVING ME IN THEIR LIFE,
TAKING INTEREST,

291

00:11:35,533 --> 00:11:37,100

BEING THERE TO ANSWER
THEIR QUESTIONS,

292

00:11:37,100 --> 00:11:38,933

TO MENTOR THEM,
TO COACH THEM.

293

00:11:38,933 --> 00:11:41,100

THEY, I BELIEVE,
DID APPRECIATE THAT.

294

00:11:41,100 --> 00:11:43,600

BUT WHAT THEY WERE SAYING IS,

295

00:11:43,600 --> 00:11:45,266

IS THAT THE FIRST TIME
YOU'RE LEARNING SOMETHING--

296

00:11:45,266 --> 00:11:48,133

AND WE'VE ALL EXPERIENCED THIS--
IT'S ACTUALLY REALLY STRESSFUL.

297

00:11:48,133 --> 00:11:50,566

AND THE LAST THING YOU NEED
IS EVEN A WELL-WISHER

298

00:11:50,566 --> 00:11:51,833

WAITING FOR YOU
TO UNDERSTAND IT.

299

00:11:51,833 --> 00:11:53,233

"DO YOU GET THIS YET?"

300

00:11:53,233 --> 00:11:54,766

YOU'RE AFRAID THAT
YOU'RE GONNA WASTE THEIR TIME.

301

00:11:54,766 --> 00:11:56,200

IF YOU'RE IN NINTH GRADE

302

00:11:56,200 --> 00:11:58,266

AND YOU FORGOT A LITTLE BIT

OF YOUR FIFTH GRADE DECIMALS,

303

00:11:58,266 --> 00:11:59,633

YOU'RE EMBARRASSED.

304

00:11:59,633 --> 00:12:01,233

YOU DON'T WANT TO ADMIT IT,
EVEN TO A WELL-WISHER.

305

00:12:01,233 --> 00:12:03,266

BUT NOW, WITH THE VIDEOS,
NO ONE'S GOING TO JUDGE THEM.

306

00:12:03,266 --> 00:12:05,033

THEY CAN ACCESS IT
WHENEVER, WHEREVER,

307

00:12:05,033 --> 00:12:07,733

REPEAT AS MUCH AS NECESSARY,
SO I JUST KEPT GOING.

308

00:12:07,733 --> 00:12:09,400

I MADE MORE AND MORE
AND MORE VIDEOS.

309

00:12:09,400 --> 00:12:11,166

AND THEN IT SOON
BECAME CLEAR

310

00:12:11,166 --> 00:12:13,333

THAT PEOPLE WHO ARE NOT
MY COUSINS WERE WATCHING.

311

00:12:13,333 --> 00:12:15,233

[laughter]

AND MAYBE EVEN A FEW--

312

00:12:15,233 --> 00:12:17,100

ACTUALLY,
WHO HERE WAS--

313

00:12:17,100 --> 00:12:19,133

WATCHED AS EARLY
AS, LIKE, 2007?

314

00:12:19,133 --> 00:12:20,866

ANYBODY?
OKAY, THERE'S A FEW.

315

00:12:20,866 --> 00:12:22,466

SO Y'ALL
ARE NOT MY COUSINS.

316

00:12:22,466 --> 00:12:26,800

THAT'S--SO Y'ALL WERE SOME
OF THE EARLY ADOPTERS OF IT.

317

00:12:26,800 --> 00:12:29,900

BUT--AND, YOU KNOW,
IT WAS NEAT FOR ME

318

00:12:29,900 --> 00:12:31,733

TO JUST SEE
THE VIEWERSHIP GROW,

319

00:12:31,733 --> 00:12:34,800

BUT THEN PEOPLE STARTED WRITING
COMMENTS BELOW THE VIDEOS.

320

00:12:34,800 --> 00:12:37,433

AND SOME OF THE COMMENTS WERE
JUST A SIMPLE "THANK YOU,"

321

00:12:37,433 --> 00:12:39,366

AND EVEN THAT
WAS A BIG DEAL.

322

00:12:39,366 --> 00:12:41,100

I DON'T KNOW HOW MUCH TIME
Y'ALL SPEND ON YOUTUBE.

323

00:12:41,100 --> 00:12:42,766

MOST OF THE COMMENTS
ARE NOT "THANK YOU."

324

00:12:42,766 --> 00:12:44,833

[laughter]

THEY ARE--

325

00:12:44,833 --> 00:12:48,733

THEY ARE SOMEWHAT EDGIER
THAN--

326

00:12:48,733 --> 00:12:51,033

BUT THEN--

BUT THEN, YOU KNOW, PEOPLE--

327

00:12:51,033 --> 00:12:53,600

I STARTED TO GET,
"HEY, I PASSED MY ALGEBRA EXAM

328

00:12:53,600 --> 00:12:55,700

BECAUSE OF THIS VIDEO,"
OR, "THIS IS A VIDEO

329

00:12:55,700 --> 00:12:58,000

AFTER RETIRING
FROM THE MILITARY,

330

00:12:58,000 --> 00:13:00,700

I'M ABLE TO GO BACK TO COLLEGE
AND REENGAGE IN MATHEMATICS."

331

00:13:00,700 --> 00:13:03,933

I REMEMBER, THIS WAS EITHER 2--
I THINK IT WAS MID-2007,

332

00:13:03,933 --> 00:13:07,700

I GOT AN E--KIND OF
A YOUTUBE MESSAGE

333

00:13:07,700 --> 00:13:09,866

FROM A MOTHER, AND I BROUGHT
MY WIFE OVER TO READ IT.

334

00:13:09,866 --> 00:13:11,233

IT WAS REALLY INCREDIBLE.

335

00:13:11,233 --> 00:13:13,466

SHE SAID HER SONS
HAD A LEARNING DISABILITY.

336

00:13:13,466 --> 00:13:15,100

THEY WERE FALLING BEHIND,

337

00:13:15,100 --> 00:13:16,966

AND THESE VIDEOS WERE THE ONLY
THINGS THAT WERE ALLOWING THEM

338

00:13:16,966 --> 00:13:18,633

TO KEEP UP
WITH THEIR CLASS,

339

00:13:18,633 --> 00:13:21,200

AND BECAUSE OF THAT,
HER AND HER ENTIRE FAMILY

340

00:13:21,200 --> 00:13:24,800

WERE PRAYING FOR ME AND
MY ENTIRE FAMILY EVERY NIGHT.

341

00:13:24,800 --> 00:13:27,966

AND YOU GOT TO IMAGINE
WHAT A STRANGE FEELING THAT WAS.

342

00:13:27,966 --> 00:13:29,766

I WAS AN ANALYST
AT A HEDGE FUND.

343

00:13:29,766 --> 00:13:31,233
[laughter]

344
00:13:31,233 --> 00:13:33,133
I WASN'T USED TO PEOPLE
PRAYING FOR ME.

345
00:13:33,133 --> 00:13:35,333
IT WAS VERY--

346
00:13:35,333 --> 00:13:36,933
SO--AT LEAST IN THAT WAY.

347
00:13:36,933 --> 00:13:40,066
AND SO I JUST KEPT GOING.

348
00:13:40,066 --> 00:13:42,366
AND THEN YOU FAST-FORWARD
TO 2009,

349
00:13:42,366 --> 00:13:45,233
YOU KNOW, THE VIEWERSHIP KEPT
GROWING AND GROWING AND GROWING.

350
00:13:45,233 --> 00:13:47,866
BY FALL OF 2009,
I FRANKLY HAD TROUBLE FOCUSING

351
00:13:47,866 --> 00:13:50,766
ON MY DAY JOB,
AND, YOU KNOW, WE--

352
00:13:50,766 --> 00:13:52,700
MY WIFE AND I, WE HAD
A LITTLE BIT OF SAVINGS,

353
00:13:52,700 --> 00:13:54,966
ESSENTIALLY
FOR A DOWN PAYMENT ON A HOUSE.

354

00:13:54,966 --> 00:13:57,700

AND--BUT, YOU KNOW, SHE SAW
THAT THIS IS WHERE MY MIND WAS,

355

00:13:57,700 --> 00:13:59,533

THIS IS WHERE
MY PASSION WAS.

356

00:13:59,533 --> 00:14:02,000

I START--YOU KNOW, WE GOT
A LITTLE BIT OF PRESS.

357

00:14:02,000 --> 00:14:03,266

AND I SAID,
"WELL, YOU KNOW,

358

00:14:03,266 --> 00:14:04,566

IT FEELS LIKE
THERE'S SOMETHING REAL HERE."

359

00:14:04,566 --> 00:14:06,300

I SET IT UP
AS A NOT-FOR-PROFIT.

360

00:14:06,300 --> 00:14:09,033

AND, YOU KNOW,
I THINK WHENEVER--

361

00:14:09,033 --> 00:14:10,600

WHEN YOU DO ANYTHING
ENTREPRENEURIAL,

362

00:14:10,600 --> 00:14:12,000

WHETHER IT'S FOR PROFIT
OR NOT FOR PROFIT,

363

00:14:12,000 --> 00:14:13,366

YOU ALMOST HAVE TO START

364

00:14:13,366 --> 00:14:16,300
FROM A SOMEWHAT DELUSIONALLY
OPTIMISTIC POINT OF VIEW.

365
00:14:16,300 --> 00:14:18,066
AND FOR ME, IT WAS LIKE,
YOU KNOW, LOOK,

366
00:14:18,066 --> 00:14:20,533
THE SOCIAL RETURN ON INVESTMENT
HERE IS OFF THE CHARTS.

367
00:14:20,533 --> 00:14:21,800
YOU KNOW, JUST ME,
I CAN DO THIS,

368
00:14:21,800 --> 00:14:23,700
BUT IF I COULD HAVE
SOME MORE PEOPLE TO HELP ME,

369
00:14:23,700 --> 00:14:25,066
WE COULD BUILD OUT
THE SOFTWARE,

370
00:14:25,066 --> 00:14:27,100
WE COULD REACH MORE
AND MORE PEOPLE IN THE WORLD,

371
00:14:27,100 --> 00:14:29,366
AND SO I WAS LIKE,
"SURELY SOMEONE WILL FUND THIS."

372
00:14:29,366 --> 00:14:31,166
AND, YOU KNOW,
SO I QUIT MY JOB.

373
00:14:31,166 --> 00:14:34,800
THIS WAS AUGUST OF 2009,

374
00:14:34,800 --> 00:14:38,000

AND LIKE
MOST ENTREPRENEURIAL STORIES,

375

00:14:38,000 --> 00:14:40,033
IT DOESN'T NECESSARILY WORK OUT
THE WAY YOU PLANNED.

376

00:14:40,033 --> 00:14:41,866
AND SO THOSE FIRST FEW MONTHS,
I PROBABLY--

377

00:14:41,866 --> 00:14:43,233
YOU KNOW, I PROBABLY
HAD CONVERSATIONS

378

00:14:43,233 --> 00:14:45,366
WITH ON THE ORDER
OF 20, 30 FOUNDATIONS

379

00:14:45,366 --> 00:14:47,566
AND DIFFERENT GROUPS,

380

00:14:47,566 --> 00:14:49,533
AND THERE WAS A LOT OF, "HEY,
THIS IS REALLY INTERESTING,

381

00:14:49,533 --> 00:14:50,733
BUT IT'S NOT QUITE
WHAT WE DO."

382

00:14:50,733 --> 00:14:52,700
IT'S KIND OF
A STRANGE NOT-FOR-PROFIT,

383

00:14:52,700 --> 00:14:54,366
WHERE IT'S, YOU KNOW, ONE GUY
ESSENTIALLY MAKING VIDEOS,

384

00:14:54,366 --> 00:14:56,000
AT THAT POINT IN TIME.

385

00:14:56,000 --> 00:14:58,000
AND YOU FAST-FORWARD
TO MAY OF 2010,

386

00:14:58,000 --> 00:15:00,066
NOW NINE MONTHS HAVE PASSED.

387

00:15:00,066 --> 00:15:02,066
I'M STARTING TO GET
PRETTY PARANOID ABOUT THIS.

388

00:15:02,066 --> 00:15:05,100
MY SON HAD BEEN BORN,
OUR EXPENSES HAD GROWN,

389

00:15:05,100 --> 00:15:08,600
WE HAD JUST STARTED RENTING
A HOUSE HERE IN MOUNTAIN VIEW.

390

00:15:08,600 --> 00:15:11,000
AND I WAS QUESTIONING, YOU KNOW,
WHAT HAVE I DONE?

391

00:15:11,000 --> 00:15:13,366
I GAVE UP
A REALLY GOOD CAREER.

392

00:15:13,366 --> 00:15:16,166
I EVEN, IN SOME WEAK POINTS,
STARTED UPDATING MY RESUME.

393

00:15:16,166 --> 00:15:18,800
AND I WAS GETTING
SOME DONATIONS.

394

00:15:18,800 --> 00:15:20,833
I WAS GETTING--YOU KNOW,
THERE WERE \$5, \$10 DONATIONS.

395

00:15:20,833 --> 00:15:23,600

THEY WERE AMOUNTING TO, YOU
KNOW, ABOUT \$100, \$200 A MONTH.

396

00:15:23,600 --> 00:15:25,666

IF IT WAS ANY OF YOU,
THANK YOU.

397

00:15:25,666 --> 00:15:28,333

BUT IT--OBVIOUSLY, WE WERE
STILL DIGGING INTO SAVINGS,

398

00:15:28,333 --> 00:15:29,700

BUT THEN MAY OF 2010,

399

00:15:29,700 --> 00:15:32,800

ALL OF A SUDDEN,
A \$10,000 DONATION COMES IN.

400

00:15:32,800 --> 00:15:34,833

SO I SEE WHO IT IS.
HER NAME'S ANN DOERR.

401

00:15:34,833 --> 00:15:36,700

SHE'S BASED IN PALO ALTO.

402

00:15:36,700 --> 00:15:38,633

SO I IMMEDIATELY
EMAIL HER BACK.

403

00:15:38,633 --> 00:15:40,066

AND I SAID,
"THANK YOU SO MUCH

404

00:15:40,066 --> 00:15:41,600

FOR THIS INCREDIBLY GENEROUS
DONATION.

405

00:15:41,600 --> 00:15:42,933

THIS IS
THE LARGEST DONATION

406
00:15:42,933 --> 00:15:44,900
THAT KHAN ACADEMY
HAS EVER RECEIVED.

407
00:15:44,900 --> 00:15:46,200
IF WE WERE
A PHYSICAL SCHOOL,

408
00:15:46,200 --> 00:15:48,933
YOU WOULD NOW HAVE A BUILDING
NAMED AFTER YOU"...

409
00:15:48,933 --> 00:15:50,233
[laughter]

410
00:15:50,233 --> 00:15:52,100
WHICH IS, I THINK,
QUITE INEXPENSIVE.

411
00:15:52,100 --> 00:15:54,700
AND ANN IMMEDIATELY
EMAILS BACK.

412
00:15:54,700 --> 00:15:56,400
SHE'S LIKE,
"WELL, I'M LOCAL.

413
00:15:56,400 --> 00:15:58,033
I'VE BEEN USING
YOUR SITE MYSELF.

414
00:15:58,033 --> 00:15:59,666
I'VE BEEN USING IT
WITH MY DAUGHTERS.

415
00:15:59,666 --> 00:16:02,700
I'D LOVE TO MEET AND FIND OUT

MORE ABOUT WHAT YOU'RE DOING."

416

00:16:02,700 --> 00:16:04,700

AND SO I THINK IT WAS
TWO OR THREE DAYS LATER,

417

00:16:04,700 --> 00:16:07,166

WE MET IN DOWNTOWN PALO ALTO
ON UNIVERSITY AVENUE

418

00:16:07,166 --> 00:16:08,666

AT AN INDIAN BUFFET RESTAURANT,

419

00:16:08,666 --> 00:16:13,600

AND OVER LUNCH, ANN ASKS ME,
"SO WHAT'S YOUR GOAL HERE?"

420

00:16:13,600 --> 00:16:15,966

AND I TOLD HER, YOU KNOW,
WHEN YOU FILL OUT THE PAPERWORK

421

00:16:15,966 --> 00:16:18,033

TO BE A NOT-FOR-PROFIT
WITH THE IRS,

422

00:16:18,033 --> 00:16:19,866

THERE'S A PART OF THE FORM
THAT SAYS "MISSION:"

423

00:16:19,866 --> 00:16:21,766

AND THERE'S, LIKE,
A LINE AND A HALF.

424

00:16:21,766 --> 00:16:24,700

AND I FILLED OUT
"A FREE WORLD-CLASS EDUCATION

425

00:16:24,700 --> 00:16:26,566

FOR ANYONE ANYWHERE."

426

00:16:26,566 --> 00:16:28,900

AND ANN SAID,
"THAT'S AMBITIOUS."

427

00:16:28,900 --> 00:16:29,933

[laughter]

428

00:16:29,933 --> 00:16:31,866

"HOW DO YOU SEE YOURSELF
DOING THAT?"

429

00:16:31,866 --> 00:16:34,033

AND I TOLD HER, "I DON'T KNOW.
THIS IS A MISSION STATEMENT.

430

00:16:34,033 --> 00:16:35,866

I DON'T EXPECT TO JUST
CHECK IT OFF TOMORROW

431

00:16:35,866 --> 00:16:37,733

AND THEN MOVE ON TO HEALTH CARE
OR SOMETHING."

432

00:16:37,733 --> 00:16:40,733

[laughter]

433

00:16:42,766 --> 00:16:44,666

"BUT I THINK WE CAN MAKE
A LOT OF PROGRESS HERE."

434

00:16:44,666 --> 00:16:47,466

AND SO I SHOWED HER--I HAD
A BIG STACK OF THESE LETTERS

435

00:16:47,466 --> 00:16:49,666

AND TESTIMONIALS
THAT PEOPLE WERE SENDING.

436

00:16:49,666 --> 00:16:51,966

I SHOWED HER THE VIEWERSHIP
FROM THE VIDEOS.

437

00:16:51,966 --> 00:16:54,966

I HAD ALL THESE SCREENSHOTS
FROM THE SOFTWARE

438

00:16:54,966 --> 00:16:57,833

THAT I HAD BEEN--AND I WAS STILL
WORKING ON FOR MY COUSINS,

439

00:16:57,833 --> 00:16:59,466

THE TEACHER TOOL KIT
THAT HAD BEEN USED

440

00:16:59,466 --> 00:17:01,933

AT A COUPLE OF SUMMER CAMPS
IN THIS AREA.

441

00:17:01,933 --> 00:17:03,833

AND SO ANN SAYS, "YOU KNOW,
YOU'VE BEEN ABLE TO DO

442

00:17:03,833 --> 00:17:05,533

A SURPRISING AMOUNT

443

00:17:05,533 --> 00:17:07,633

WITH, IT SEEMS LIKE,
VERY LITTLE RESOURCES.

444

00:17:07,633 --> 00:17:09,433

I HAVE ONE QUESTION.

445

00:17:09,433 --> 00:17:11,533

HOW ARE YOU
SUPPORTING YOURSELF?"

446

00:17:11,533 --> 00:17:14,300

AND IN AS PROUD OF A WAY
AS POSSIBLE,

447

00:17:14,300 --> 00:17:17,233

I SAID, "I'M NOT."

[laughter]

448

00:17:17,233 --> 00:17:21,033

AND SO ANN KIND OF
PROCESSES THAT,

449

00:17:21,033 --> 00:17:22,866

AND WE PART WAYS.

450

00:17:22,866 --> 00:17:24,700

AND TEN MINUTES LATER,
I'M DRIVING INTO MY DRIVEWAY

451

00:17:24,700 --> 00:17:26,466

HERE IN MOUNTAIN VIEW,

452

00:17:26,466 --> 00:17:28,366

AND I GET A TEXT MESSAGE,
AND IT'S FROM ANN.

453

00:17:28,366 --> 00:17:30,966

AND IT SAYS, "YOU REALLY NEED
TO BE SUPPORTING YOURSELF.

454

00:17:30,966 --> 00:17:33,566

I'VE JUST WIRED YOU
\$100,000."

455

00:17:33,566 --> 00:17:35,833

SO THAT WAS A GOOD DAY.

456

00:17:35,833 --> 00:17:38,366

THAT WAS--

[laughter]

457

00:17:38,366 --> 00:17:40,033

AND FRANKLY,
IT JUST GOT--

458
00:17:40,033 --> 00:17:43,133
YOU KNOW, THE--CRAZIER
AND CRAZIER SERIES OF EVENTS.

459
00:17:43,133 --> 00:17:46,566
ABOUT A MONTH LATER,
THIS IS SUMMER OF 2010,

460
00:17:46,566 --> 00:17:49,266
I WAS RUNNING A LITTLE
SUMMER CAMP IN PORTOLA VALLEY

461
00:17:49,266 --> 00:17:50,466
AT A MIDDLE SCHOOL,
A VERY SMALL--

462
00:17:50,466 --> 00:17:51,866
IT WAS ME AND A FRIEND.
WE WERE--

463
00:17:51,866 --> 00:17:53,366
AND IT WAS REALLY
AROUND THIS IDEA OF,

464
00:17:53,366 --> 00:17:54,433
"HEY, I'M THIS VIRTUAL GUY.

465
00:17:54,433 --> 00:17:55,966
YOU CAN GET LECTURES
ON DEMAND NOW.

466
00:17:55,966 --> 00:17:58,033
WHAT COULD YOU NOW DO
WITH A PHYSICAL CLASSROOM?"

467
00:17:58,033 --> 00:17:59,700
I NEVER VIEWED

THIS VIRTUAL STUFF

468

00:17:59,700 --> 00:18:01,300

AS SOMEHOW BEING
A REPLACEMENT.

469

00:18:01,300 --> 00:18:03,133

I ALWAYS VIEWED IT AS LIBERATING
THE PHYSICAL CLASSROOM.

470

00:18:03,133 --> 00:18:05,466

AND SO THE SUMMER CAMP WAS
A WAY TO EXPERIMENT WITH THAT.

471

00:18:05,466 --> 00:18:07,500

AND WE HAD KIDS DOING DIALOGUE
AND SIMULATIONS

472

00:18:07,500 --> 00:18:09,966

AND MAKING PROJECTS, AND WE WERE
IN THE MIDDLE OF ONE--

473

00:18:09,966 --> 00:18:11,666

IT WAS A BUNCH
OF MIDDLE SCHOOL STUDENTS--

474

00:18:11,666 --> 00:18:13,133

IT WAS A SIMULATION
THAT I CAME UP WITH.

475

00:18:13,133 --> 00:18:15,400

WE HAD SIX KIDS
PLAYING A GAME OF RISK,

476

00:18:15,400 --> 00:18:17,200

WHILE THE OTHER 20
TRADED SECURITIES

477

00:18:17,200 --> 00:18:19,366

BASED ON THE OUTCOME

OF THE GAME OF RISK.

478

00:18:19,366 --> 00:18:22,166

[laughter]

IT'S A GOOD GAME.

479

00:18:22,166 --> 00:18:25,433

AND WHILE

THAT WAS HAPPENING,

480

00:18:25,433 --> 00:18:27,800

ALL OF A SUDDEN, I START GETTING

TEXT MESSAGES FROM ANN,

481

00:18:27,800 --> 00:18:29,800

WHICH YOU COULD IMAGINE

I NOW TAKE VERY SERIOUSLY.

482

00:18:29,800 --> 00:18:31,466

[laughter]

483

00:18:31,466 --> 00:18:34,500

AND SO--AND IT WAS ACTUALLY

HARD TO READ,

484

00:18:34,500 --> 00:18:35,700

'CAUSE THEY WERE DISJOINTED,

485

00:18:35,700 --> 00:18:37,866

AND IT WASN'T CLEAR

WHICH CAME BEFORE WHICH,

486

00:18:37,866 --> 00:18:39,900

BUT THEY READ

ALONG THE LINES OF,

487

00:18:39,900 --> 00:18:42,766

"I'M AT THE ASPEN IDEAS FESTIVAL

IN ASPEN, COLORADO.

488

00:18:42,766 --> 00:18:46,433

I'M IN THE MAIN PAVILION.

BILL GATES IS ONSTAGE.

489

00:18:46,433 --> 00:18:49,333

LAST FIVE MINUTES

TALKING ABOUT KHAN ACADEMY."

490

00:18:49,333 --> 00:18:51,600

SO I DIDN'T KNOW

WHAT TO MAKE OF THIS.

491

00:18:51,600 --> 00:18:53,433

SO I IMMEDIATELY

BOOT THE NEAREST SEVENTH GRADER

492

00:18:53,433 --> 00:18:54,766

OFF OF A COMPUTER.

[laughter]

493

00:18:54,766 --> 00:18:58,100

AND I START LOOKING

FOR SOME EVIDENCE OF THIS EVENT

494

00:18:58,100 --> 00:18:59,633

THAT ANN

IS TALKING ABOUT.

495

00:18:59,633 --> 00:19:00,866

AND IT TOOK

ABOUT 20 MINUTES,

496

00:19:00,866 --> 00:19:02,233

AND I DID EVENTUALLY FIND

THE FOOTAGE.

497

00:19:02,233 --> 00:19:04,100

IT WAS LITERALLY

WALTER ISAACSON,

498

00:19:04,100 --> 00:19:06,466

HEAD OF THE ASPEN INSTITUTE,
ONSTAGE WITH BILL GATES.

499

00:19:06,466 --> 00:19:09,133

AND HE ASKS BILL--
I CALL HIM BILL NOW--

500

00:19:09,133 --> 00:19:10,766

[laughter]

501

00:19:10,766 --> 00:19:14,066

HE ASKS BILL,
"WHAT ARE YOU EXCITED ABOUT?"

502

00:19:14,066 --> 00:19:16,566

AND HE JUST RANDOMLY STARTS
GOING, "WELL, THERE'S THIS SITE,

503

00:19:16,566 --> 00:19:18,966

KHAN ACADEMY.
I USE IT WITH MY KIDS.

504

00:19:18,966 --> 00:19:21,500

I USE IT MYSELF," AND HE WENT
ON AND ON AND ON ABOUT IT.

505

00:19:21,500 --> 00:19:23,333

I MEAN, HE CLEARLY SPENT
A SIGNIFICANT AMOUNT OF TIME

506

00:19:23,333 --> 00:19:24,800

WITH THE SITE.

507

00:19:24,800 --> 00:19:26,433

AND YOU COULD IMAGINE
HOW I FELT.

508

00:19:26,433 --> 00:19:28,033

YOU KNOW, AT FIRST,
THIS JUST FELT LIKE A DREAM.

509
00:19:28,033 --> 00:19:29,833
THIS WAS SURREAL.

510
00:19:29,833 --> 00:19:31,700
BUT THEN THE VERY NEXT IMPULSE,

511
00:19:31,700 --> 00:19:33,366
I ACTUALLY BECAME
REALLY NERVOUS.

512
00:19:33,366 --> 00:19:35,300
I WAS LIKE,
THOSE VIDEOS WERE FOR NADIA...

513
00:19:35,300 --> 00:19:38,333
[laughter]
NOT BILL GATES.

514
00:19:38,333 --> 00:19:40,166
AND FRANKLY,
I DIDN'T--

515
00:19:40,166 --> 00:19:42,333
YOU KNOW, I WENT HOME
THAT EVENING.

516
00:19:42,333 --> 00:19:43,400
I TOLD MY WIFE ABOUT IT.

517
00:19:43,400 --> 00:19:44,600
A COUPLE OF MY FRIENDS
HEARD ABOUT IT

518
00:19:44,600 --> 00:19:46,666
AS, YOU KNOW,
THEY EMAILED ME OR CALLED ME.

519

00:19:46,666 --> 00:19:49,000

AND THEN I--IT--

I WAS CONFUSED.

520

00:19:49,000 --> 00:19:50,166

YOU KNOW,

WHAT DO I DO NOW?

521

00:19:50,166 --> 00:19:52,766

WHAT'S THE PROTOCOL?

DO I CALL HIM?

522

00:19:52,766 --> 00:19:55,333

[laughter]

I'M GUESSING HE'S NOT LISTED.

523

00:19:55,333 --> 00:19:59,100

AND THEY LEFT ME IN THAT LIMBO

FOR ABOUT TWO WEEKS.

524

00:19:59,100 --> 00:20:01,433

TWO WEEKS LATER,

I'M IN MY WALK-IN CLOSET,

525

00:20:01,433 --> 00:20:03,500

ABOUT TO RECORD A VIDEO.

526

00:20:03,500 --> 00:20:05,433

AND--

[laughter]

527

00:20:05,433 --> 00:20:09,033

AND CELL PHONE RINGS,

AND IT'S A SEATTLE NUMBER.

528

00:20:09,033 --> 00:20:11,100

I ANSWER IT.

"HELLO."

529

00:20:11,100 --> 00:20:14,300
"HI, THIS IS LARRY COHEN.
I'M BILL GATES' CHIEF OF STAFF.

530
00:20:14,300 --> 00:20:16,466
YOU MIGHT HAVE HEARD
THAT BILL'S A FAN."

531
00:20:16,466 --> 00:20:19,733
"YEAH, I'VE HEARD THAT."
[laughter]

532
00:20:19,733 --> 00:20:24,300
"AND IF YOU'RE FREE
IN THE NEXT FEW DAYS OR WEEKS,

533
00:20:24,300 --> 00:20:25,766
WE'D LOVE TO FLY YOU
UP TO SEATTLE

534
00:20:25,766 --> 00:20:28,000
AND FIND OUT MORE ABOUT HOW WE
MIGHT BE ABLE TO WORK TOGETHER

535
00:20:28,000 --> 00:20:30,100
OR POTENTIALLY SUPPORT
WHAT YOU'RE DOING."

536
00:20:30,100 --> 00:20:32,433
AND I WAS LOOKING
AT MY CALENDAR

537
00:20:32,433 --> 00:20:34,133
FOR THE MONTH--

538
00:20:34,133 --> 00:20:36,133
COMPLETELY BLANK.
[laughter]

539
00:20:36,133 --> 00:20:38,133

I SAID, YEAH,
MAYBE NEXT WEDNESDAY

540
00:20:38,133 --> 00:20:39,866
AFTER CUTTING MY NAILS,
MAYBE DO SOME LAUNDRY,

541
00:20:39,866 --> 00:20:43,533
BUT I THINK I CAN--
I THINK I CAN MEET BILL GATES.

542
00:20:43,533 --> 00:20:45,933
AND SO WE HAD
THE MEETING.

543
00:20:45,933 --> 00:20:48,166
AND IT WAS ACTUALLY VERY SIMILAR
TO THE MEETING WITH ANN.

544
00:20:48,166 --> 00:20:50,400
AND RIGHT
AROUND THE SAME TIME,

545
00:20:50,400 --> 00:20:51,766
SOME FOLKS FROM GOOGLE
REACHED OUT.

546
00:20:51,766 --> 00:20:53,133
AND I'VE TRIED TO SEE
IF THERE WAS ANY CONNECTION,

547
00:20:53,133 --> 00:20:54,466
BUT THESE WERE ALL
INDEPENDENT EVENTS.

548
00:20:54,466 --> 00:20:56,400
SOME FOLKS FROM GOOGLE
REACHED OUT,

549
00:20:56,400 --> 00:20:58,100

AND THEY SAID, "HEY,
I DON'T KNOW IF YOU KNOW,

550

00:20:58,100 --> 00:21:00,600
BUT A LOT OF THE TEAM HERE
HAS BEEN USING KHAN ACADEMY

551

00:21:00,600 --> 00:21:02,400
WITH OUR CHILDREN.
WE LOVE THE SITE.

552

00:21:02,400 --> 00:21:04,933
WE'D LOVE TO THINK ABOUT,
YOU KNOW, WHAT YOU COULD DO

553

00:21:04,933 --> 00:21:06,633
IF YOU HAD MORE RESOURCES.

554

00:21:06,633 --> 00:21:08,333
SO, YOU KNOW, WHAT WOULD YOU DO
IF YOU HAD--

555

00:21:08,333 --> 00:21:10,533
WHAT WOULD YOU DO
IF YOU HAD \$2 MILLION?"

556

00:21:10,533 --> 00:21:13,300
AND I SAID, YOU KNOW,
"IS THIS AN OPEN QUESTION?"

557

00:21:13,300 --> 00:21:14,300
[laughter]

558

00:21:14,300 --> 00:21:16,133
BUY NEW PANTS OR SOMETHING.
NO.

559

00:21:16,133 --> 00:21:18,400
BUT I--VERY, VERY SIMILAR
TO THAT CONVERSATION,

560

00:21:18,400 --> 00:21:20,800
SO ALL OF A SUDDEN, 2010,

561

00:21:20,800 --> 00:21:22,800
IT ALL--YOU KNOW,
ALL THE STARS ALIGNED.

562

00:21:22,800 --> 00:21:25,566
AND THE GATES FOUNDATION
AND GOOGLE WERE THE FIRST

563

00:21:25,566 --> 00:21:27,333
TO KIND OF REALLY ALLOW
KHAN ACADEMY

564

00:21:27,333 --> 00:21:29,066
TO BECOME
A REAL ORGANIZATION

565

00:21:29,066 --> 00:21:31,166
SO THAT WE COULD START HIRING
OUR FIRST--

566

00:21:31,166 --> 00:21:32,733
THE BEGINNINGS OF OUR TEAM

567

00:21:32,733 --> 00:21:34,966
AND THEN GET OFFICE SPACE,
ET CETERA, ET CETERA.

568

00:21:34,966 --> 00:21:37,933
AND WHAT WE IMMEDIATELY STARTED,
I GUESS YOU COULD SAY,

569

00:21:37,933 --> 00:21:39,566
INVESTING IN OR WORKING ON

570

00:21:39,566 --> 00:21:43,366

WAS THE INTERACTIVE MATH PART
OF KHAN ACADEMY.

571

00:21:43,366 --> 00:21:45,766
AND WHAT YOU SEE HERE, THIS IS
WHAT WE CALL OUR KNOWLEDGE MAP,

572

00:21:45,766 --> 00:21:47,466
AND IT'S NO LONGER
OUR PRIMARY NAVIGATION INTERFACE

573

00:21:47,466 --> 00:21:48,766
ON KHAN ACADEMY.

574

00:21:48,766 --> 00:21:50,966
IT WAS BACK WHEN IT
WAS BEING USED FOR MY COUSINS.

575

00:21:50,966 --> 00:21:52,100
BUT IT'S STILL THERE.

576

00:21:52,100 --> 00:21:53,966
BUT WE--I LIKE TO SHOW THIS
BECAUSE IT SHOWS

577

00:21:53,966 --> 00:21:55,866
HOW WE THINK
ABOUT MATHEMATICS.

578

00:21:55,866 --> 00:21:58,733
SO EACH OF THOSE CIRCLES THERE
ARE A CONCEPT IN MATH,

579

00:21:58,733 --> 00:22:01,000
AND THE ONES AT THE TOP
ARE BASIC MATHEMATICS.

580

00:22:01,000 --> 00:22:02,733
THEY'RE THINGS LIKE
BASIC ARITHMETIC--

581

00:22:02,733 --> 00:22:03,866

ONE PLUS ONE EQUALS TWO.

582

00:22:03,866 --> 00:22:05,700

AND AS YOU GO FURTHER
AND FURTHER DOWN,

583

00:22:05,700 --> 00:22:09,366

IT GOES ALL THE WAY TO COLLEGE
LEVEL STATISTICS AND CALCULUS,

584

00:22:09,366 --> 00:22:11,733

AND OUR GOAL IS TO JUST KEEP
GOING ON AND ON AND ON

585

00:22:11,733 --> 00:22:13,533

AND EVENTUALLY INTO
OTHER SUBJECTS, AS WELL.

586

00:22:13,533 --> 00:22:16,266

YOU SAW, THE VIDEOS ARE MUCH
BROADER THAN JUST MATH.

587

00:22:16,266 --> 00:22:18,566

AND THE IDEA IS,
ONCE A STUDENT SHOWS MASTERY

588

00:22:18,566 --> 00:22:20,033

IN A BASIC CONCEPT,

589

00:22:20,033 --> 00:22:21,666

IT THEN MOVES THEM ON
TO A MORE ADVANCED CONCEPT.

590

00:22:21,666 --> 00:22:23,866

AND THOSE LINES SHOW
THAT DEPENDENCY.

591

00:22:23,866 --> 00:22:25,133

AND AT SOME LEVEL,
THAT'S COMMON SENSE.

592

00:22:25,133 --> 00:22:26,833

THAT'S THE WAY YOU WOULD PLAY
A VIDEO GAME.

593

00:22:26,833 --> 00:22:29,266

YOU BEAT--
YOU KEEP TRYING ON LEVEL ONE

594

00:22:29,266 --> 00:22:31,800

UNTIL YOU BEAT THE LEVEL ONE
BOSS, AND YOU GO TO LEVEL TWO.

595

00:22:31,800 --> 00:22:33,700

IT'S THE WAY YOU WOULD LEARN
A MARTIAL ART.

596

00:22:33,700 --> 00:22:35,500

YOU KEEP PRACTICING
THE WHITE BELT SKILLS,

597

00:22:35,500 --> 00:22:37,233

AND ONLY ONCE YOU'VE MASTERED
WHITE BELT

598

00:22:37,233 --> 00:22:39,766

AND YOU PASS THE TEST,
THEN YOU BECOME A YELLOW BELT.

599

00:22:39,766 --> 00:22:42,266

BUT WHAT WE ALWAYS POINT OUT--
THIS IS NOT THE WAY

600

00:22:42,266 --> 00:22:44,800

THAT A TRADITIONAL SCHOOL MODEL
IS ARCHITECTED.

601

00:22:44,800 --> 00:22:47,166
A TRADITIONAL SCHOOL MODEL--

602
00:22:47,166 --> 00:22:49,333
YOU GROUP STUDENTS TOGETHER,
USUALLY BY AGE,

603
00:22:49,333 --> 00:22:51,633
AND THEN LATER BY AGE
AND PERCEIVED ABILITY,

604
00:22:51,633 --> 00:22:53,200
BUT USUALLY BY AGE,

605
00:22:53,200 --> 00:22:55,300
AND THEN YOU MOVE THEM TOGETHER
AT A SET PACE.

606
00:22:55,300 --> 00:22:57,033
AND WHAT HAPPENS IS,

607
00:22:57,033 --> 00:23:00,166
NORMALLY IN CLASS, MOST OF IT
IS THE TEACHER LECTURING.

608
00:23:00,166 --> 00:23:02,033
AND THEN STUDENTS GO HOME,
THEY DO HOMEWORK,

609
00:23:02,033 --> 00:23:03,600
THEN THE NEXT DAY
YOU REVIEW HOMEWORK A LITTLE BIT

610
00:23:03,600 --> 00:23:05,533
AND MAYBE GET
A LITTLE BIT MORE LECTURE.

611
00:23:05,533 --> 00:23:07,600
THEN YOU GO BACK,
DO A LITTLE MORE HOMEWORK,

612

00:23:07,600 --> 00:23:09,700

AND THEN THAT CYCLE--HOMEWORK,
LECTURE, HOMEWORK, LECTURE,

613

00:23:09,700 --> 00:23:12,200

HOMEWORK, LECTURE--CONTINUES
FOR ABOUT TWO OR THREE WEEKS,

614

00:23:12,200 --> 00:23:14,033

AND THEN YOU HAVE AN EXAM.

615

00:23:14,033 --> 00:23:15,433

AND LET'S SAY THAT EXAM--
LET'S SAY THE UNIT

616

00:23:15,433 --> 00:23:17,733

THAT WE WERE WORKING ON
WAS BASIC EXPONENTS,

617

00:23:17,733 --> 00:23:21,733

AND ON THAT EXAM, LET'S SAY
I GET A 75%, YOU GET A 90%,

618

00:23:21,733 --> 00:23:23,500

YOU GET A 60%,

619

00:23:23,500 --> 00:23:26,933

AND EVEN THOUGH THE EXAM
IDENTIFIED THOSE GAPS--

620

00:23:26,933 --> 00:23:29,233

CLEAR, THE PERSON
WHO GOT THE 60%

621

00:23:29,233 --> 00:23:30,900

DIDN'T KNOW 40%
OF THE MATERIAL--

622

00:23:30,900 --> 00:23:32,533
EVEN THOUGH IT IDENTIFIED IT--
EVEN THE "A" STUDENT

623
00:23:32,533 --> 00:23:34,200
WHO DIDN'T KNOW 5%
OR 10% OF THE MATERIAL--

624
00:23:34,200 --> 00:23:36,866
EVEN THOUGH THE ASSESSMENT
IDENTIFIED THOSE GAPS,

625
00:23:36,866 --> 00:23:38,600
THE WHOLE CLASS THEN MOVES ON
TO THE NEXT CONCEPT,

626
00:23:38,600 --> 00:23:41,033
SOMETHING THAT PROBABLY BUILDS
ON THOSE GAPS,

627
00:23:41,033 --> 00:23:43,633
SAY, NEGATIVE EXPONENTS
OR LOGARITHMS.

628
00:23:43,633 --> 00:23:45,433
AND TO PUT IT
IN PERSPECTIVE,

629
00:23:45,433 --> 00:23:47,166
ON SOME LEVEL,
HOW ABSURD THIS IS,

630
00:23:47,166 --> 00:23:49,866
IMAGINE IF WE DID OTHER THINGS
IN OUR LIFE THAT WAY,

631
00:23:49,866 --> 00:23:51,200
SAY, HOME BUILDING.

632
00:23:51,200 --> 00:23:53,433

[laughter]

633

00:23:53,433 --> 00:23:56,500

SO YOU BRING
THE CONTRACTOR IN,

634

00:23:56,500 --> 00:23:58,633

AND YOU SAY, "WELL, WE'VE BEEN
TOLD WE HAVE THREE WEEKS

635

00:23:58,633 --> 00:24:01,400

TO BUILD A FOUNDATION.
DO WHAT YOU CAN."

636

00:24:01,400 --> 00:24:02,733

[laughter]

637

00:24:02,733 --> 00:24:04,533

SO THE CONTRACTOR DOES
WHAT THEY CAN--

638

00:24:04,533 --> 00:24:06,766

MAYBE IT RAINS, MAYBE
THE SUPPLIES DON'T SHOW UP,

639

00:24:06,766 --> 00:24:08,900

MAYBE SOME OF THE WORKERS
FALL SICK.

640

00:24:08,900 --> 00:24:10,766

AND AFTER THREE WEEKS,
YOU GET THE INSPECTOR.

641

00:24:10,766 --> 00:24:12,833

THE INSPECTOR COMES AND SAYS,
"WELL, YOU KNOW, THE CONCRETE'S

642

00:24:12,833 --> 00:24:14,433

STILL WET AROUND THERE.

643

00:24:14,433 --> 00:24:15,700

THAT PART'S
NOT QUITE UP TO CODE.

644

00:24:15,700 --> 00:24:17,700

I'LL GIVE IT AN 80%."

645

00:24:17,700 --> 00:24:19,366

SO GREAT,
THAT'S A B-MINUS OR C-PLUS.

646

00:24:19,366 --> 00:24:21,666

LET'S BUILD THE FIRST FLOOR.
[laughter]

647

00:24:21,666 --> 00:24:23,733

SAME PROCESS, "CONTRACTOR,
WE HAVE ANOTHER THREE WEEKS.

648

00:24:23,733 --> 00:24:25,266

DO WHAT YOU CAN."

649

00:24:25,266 --> 00:24:27,600

AFTER THREE WEEKS, INSPECTOR
COMES, "HEY, THAT'S A 90%."

650

00:24:27,600 --> 00:24:29,433

"OKAY, GREAT.
LET'S BUILD THE SECOND FLOOR."

651

00:24:29,433 --> 00:24:31,500

AND YOU KEEP DOING THAT--
THIRD FLOOR, FOURTH FLOOR.

652

00:24:31,500 --> 00:24:32,700

AND THEN ALL OF A SUDDEN,
WHILE YOU'RE BUILDING

653

00:24:32,700 --> 00:24:34,933

THE FOURTH FLOOR,
THE WHOLE THING COLLAPSES.

654

00:24:34,933 --> 00:24:37,133
AND THE REACTION THAT PEOPLE
TEND TO HAVE,

655

00:24:37,133 --> 00:24:38,966
OR IF WE HAVE THE SAME REACTION
THAT PEOPLE OFTEN HAVE

656

00:24:38,966 --> 00:24:41,900
IN EDUCATION, THEY SAY, "OH,
MAYBE IT WAS A BAD CONTRACTOR,"

657

00:24:41,900 --> 00:24:44,666
OR, "MAYBE WE NEEDED
BETTER INSPECTION

658

00:24:44,666 --> 00:24:46,233
OR MORE INSPECTION,"
AND WHO KNOWS?

659

00:24:46,233 --> 00:24:48,366
MAYBE THAT HAD SOME PART
TO DO WITH IT.

660

00:24:48,366 --> 00:24:49,833
BUT THE REAL THING
THAT IS GOING ON

661

00:24:49,833 --> 00:24:51,766
IS THAT THE PROCESS
WAS ABSURD.

662

00:24:51,766 --> 00:24:53,200
YOU WERE
ARTIFICIALLY CONSTRAINING

663

00:24:53,200 --> 00:24:55,333

HOW LONG YOU HAD
TO WORK ON SOMETHING

664
00:24:55,333 --> 00:24:57,000
PRETTY MUCH ENSURING
A VARIABLE OUTCOME,

665
00:24:57,000 --> 00:24:59,233
PRETTY MUCH ENSURING
YOU WERE GOING TO HAVE GAPS.

666
00:24:59,233 --> 00:25:01,800
THEN YOU TAKE THE TROUBLE
OF IDENTIFYING THOSE GAPS,

667
00:25:01,800 --> 00:25:04,400
BUT ONCE YOU'VE IDENTIFIED THEM,
YOU JUST COMPLETELY IGNORE THEM,

668
00:25:04,400 --> 00:25:05,933
AND THEN YOU MOVE ON.

669
00:25:05,933 --> 00:25:07,700
AND SO WHAT WE SAY,
INSTEAD OF HOLDING FIXED

670
00:25:07,700 --> 00:25:09,866
HOW LONG
AND WHEN YOU LEARN SOMETHING

671
00:25:09,866 --> 00:25:12,266
AND PRETTY MUCH ENSURING
A VARIABLE OUTCOME--

672
00:25:12,266 --> 00:25:14,633
"A," "B," "C," "D," "F"--
DO IT THE OTHER WAY AROUND.

673
00:25:14,633 --> 00:25:18,266
HOLD FIXED THAT EVERY STUDENT

SHOULD MASTER BASIC EXPONENTS,

674

00:25:18,266 --> 00:25:19,800

SHOULD GET
TO THAT "A" LEVEL,

675

00:25:19,800 --> 00:25:21,466

AND THEN THE CONSTRAINT
THAT GETS LOOSENEED,

676

00:25:21,466 --> 00:25:22,866

THE VARIABLE CONSTRAINT,

677

00:25:22,866 --> 00:25:27,000

IS WHEN AND HOW LONG
THEY GET TO LEARN THE MATERIAL.

678

00:25:27,000 --> 00:25:28,833

RIGHT WHEN WE STARTED,

679

00:25:28,833 --> 00:25:31,000

SOME LOCAL SCHOOL DISTRICTS,
LOS ALTOS, ESPECIALLY,

680

00:25:31,000 --> 00:25:32,600

BUT THEN SHORTLY AFTER,
MOUNTAIN VIEW

681

00:25:32,600 --> 00:25:33,966

AND OTHER LOCAL SCHOOL DISTRICTS

682

00:25:33,966 --> 00:25:36,766

AND THEN MANY AROUND THE COUNTRY
AND WORLD, ACTUALLY,

683

00:25:36,766 --> 00:25:38,700

STARTED SAYING, "WELL,
HOW COULD WE USE KHAN ACADEMY

684

00:25:38,700 --> 00:25:40,300
IN A CLASSROOM?"

685
00:25:40,300 --> 00:25:42,133
AND YOU KNOW,
OUR POINT OF VIEW IS,

686
00:25:42,133 --> 00:25:44,833
WELL, THIS COULD FREE UP
THIS WHOLE "ONE PACE FITS ALL."

687
00:25:44,833 --> 00:25:46,700
YOU COULD HAVE EVERY STUDENT
LEARNING AT THEIR OWN PACE,

688
00:25:46,700 --> 00:25:48,500
MASTERING CONCEPTS.

689
00:25:48,500 --> 00:25:50,466
YOU KNOW, WE HAD ALREADY HAD
SOME DASHBOARDS FOR TEACHERS,

690
00:25:50,466 --> 00:25:51,933
AND WE WERE
WORKING ON MORE.

691
00:25:51,933 --> 00:25:53,666
AND THE IDEA--AND THIS IS--
THIS IS KIND OF--

692
00:25:53,666 --> 00:25:56,500
WE STARTED SEEING THIS BEHAVIOR
BY OBSERVING THESE CLASSROOMS--

693
00:25:56,500 --> 00:25:59,100
IS THAT, YOU KNOW, EVEN THOUGH
EVERY STUDENT IS LEARNING

694
00:25:59,100 --> 00:26:00,966
AT THEIR OWN PACE,

695

00:26:00,966 --> 00:26:03,500

IT WASN'T AN ISOLATED KIND OF
LEARNING EXPERIENCE.

696

00:26:03,500 --> 00:26:05,233

IN FACT, IT BECAME
MORE INTERACTIVE

697

00:26:05,233 --> 00:26:07,400

WHERE, YOU KNOW, THIS DASHBOARD
THAT WE HAVE FOR TEACHERS

698

00:26:07,400 --> 00:26:09,900

KIND OF ENCAPSULATES
HOW A CLASSROOM COULD RUN,

699

00:26:09,900 --> 00:26:12,233

WHERE EACH OF THESE COLUMNS
ARE ONE OF THOSE CONCEPTS

700

00:26:12,233 --> 00:26:13,833

THAT YOU SAW
ON THE KNOWLEDGE MAP.

701

00:26:13,833 --> 00:26:16,233

EACH OF THESE ROWS
ARE A STUDENT IN THE CLASS.

702

00:26:16,233 --> 00:26:19,533

AND THEN THE DEPTH OF BLUE

703

00:26:19,533 --> 00:26:22,500

IS THE SYSTEM'S SENSE OF HOW
WELL THE STUDENT UNDERSTANDS IT.

704

00:26:22,500 --> 00:26:25,600

AND THE RED STUDENTS ARE FLAGGED
THAT THIS STUDENT SEEMS STUCK.

705

00:26:25,600 --> 00:26:27,066

AND SO AS A TEACHER,
I COULD WALK IN,

706

00:26:27,066 --> 00:26:29,466

I COULD SAY, "OH, LOOK,
A LOT OF THE STUDENTS SEEM FINE

707

00:26:29,466 --> 00:26:31,133

WITH SQUARE ROOTS
OF PERFECT SQUARES,

708

00:26:31,133 --> 00:26:33,033

BUT THERE'S A COUPLE OF
STUDENTS WHO ARE HAVING TROUBLE

709

00:26:33,033 --> 00:26:34,833

WITH SOLID GEOMETRY."

710

00:26:34,833 --> 00:26:37,166

EITHER I COULD DO A VERY FOCUSED
INTERVENTION WITH THOSE STUDENTS

711

00:26:37,166 --> 00:26:39,066

WHILE LETTING EVERY OTHER
STUDENT LEARN AT THEIR OWN PACE,

712

00:26:39,066 --> 00:26:42,266

OR EVEN BETTER, I CAN GET SOME
OF THE PEERS TO HELP EACH OTHER.

713

00:26:42,266 --> 00:26:44,033

MAYBE SOME OF THE STUDENTS
WHO HAVE MASTERED IT ALREADY.

714

00:26:44,033 --> 00:26:46,666

LOOK AT THE ADDED BENEFIT
OF YOU LEARN IT EVEN DEEPER

715

00:26:46,666 --> 00:26:50,266
WHEN YOU EXPLAIN IT.

716
00:26:50,266 --> 00:26:53,933
THIS IS SOME DATA
FROM A LOCAL CHARTER SCHOOL

717
00:26:53,933 --> 00:26:56,033
UP IN OAKLAND, CALIFORNIA.

718
00:26:56,033 --> 00:26:58,000
AND YOU KNOW, THIS IS,
YOU KNOW--

719
00:26:58,000 --> 00:26:59,733
AND I'LL CAVEAT THIS.

720
00:26:59,733 --> 00:27:01,133
I DON'T WANT TO GIVE ANYONE
THE SENSE

721
00:27:01,133 --> 00:27:04,433
THAT YOU CAN JUST DROP
KHAN ACADEMY INTO A CLASSROOM,

722
00:27:04,433 --> 00:27:05,933
AND ALL OF A SUDDEN,
THE BUTTERFLIES WILL FLY

723
00:27:05,933 --> 00:27:07,900
AND THE FLOWERS WILL BLOOM.

724
00:27:07,900 --> 00:27:09,833
IT'S A TOOL,
AND LIKE ALL TOOLS,

725
00:27:09,833 --> 00:27:12,766
IT'S GOING TO BE AS GOOD
AS HOW IT'S BEING USED.

726

00:27:12,766 --> 00:27:15,433

AND, YOU KNOW, THE CREDIT
TO WHAT I'M ABOUT TO TALK TO YOU

727

00:27:15,433 --> 00:27:17,633

IS REALLY--THE BULK OF IT
GOES TO THE TEACHING STAFF,

728

00:27:17,633 --> 00:27:19,633

ESPECIALLY THEIR HEAD TEACHER,
PETER MCINTOSH.

729

00:27:19,633 --> 00:27:21,666

BUT WHAT WAS EXCITING--
YOU KNOW, THIS WAS A--

730

00:27:21,666 --> 00:27:24,233

THIS IS A NINTH GRADE
ALGEBRA CLASSROOM.

731

00:27:24,233 --> 00:27:25,866

IT'S A CHARTER SCHOOL
IN OAKLAND, CALIFORNIA.

732

00:27:25,866 --> 00:27:28,100

THEY'RE GETTING STUDENTS
FROM THE LOCAL SCHOOL DISTRICT.

733

00:27:28,100 --> 00:27:29,700

MANY OF THESE STUDENTS,

734

00:27:29,700 --> 00:27:31,900

TWO, THREE, FOUR YEARS
BEHIND GRADE LEVEL.

735

00:27:31,900 --> 00:27:33,533

SOME OF THESE STUDENTS
DIDN'T KNOW

736

00:27:33,533 --> 00:27:36,700
THEIR MULTIPLICATION TABLES,
DIDN'T KNOW BASIC ARITHMETIC.

737
00:27:36,700 --> 00:27:38,433
AND WHAT HAPPENED HERE IS--

738
00:27:38,433 --> 00:27:40,633
YOU KNOW, THIS IS SOMETHING THAT
PETER MCINTOSH ALWAYS BELIEVED,

739
00:27:40,633 --> 00:27:42,633
IS THAT THE WAY TO ADDRESS THAT
IS TO LET THESE STUDENTS,

740
00:27:42,633 --> 00:27:44,266
EVEN IF THEY'RE IN ALGEBRA,

741
00:27:44,266 --> 00:27:46,100
MAKE SURE THAT THEY HAVE
THAT STRONG FOUNDATION

742
00:27:46,100 --> 00:27:48,433
AND TRY TO GET THEM
TO OWN THEIR OWN LEARNING,

743
00:27:48,433 --> 00:27:50,100
SET THEIR OWN GOALS,
LEARN AT THEIR OWN PACE.

744
00:27:50,100 --> 00:27:52,600
AND HE WAS JUST LOOKING FOR
A TOOL TO ALLOW HIM TO DO THAT.

745
00:27:52,600 --> 00:27:54,700
AND SO THIS CLASSROOM
AND ACTUALLY EVEN

746
00:27:54,700 --> 00:27:56,166
THE YEAR BEFORE, EVEN,

THIS SLIDE,

747

00:27:56,166 --> 00:27:58,566

IN 2010, THIS CLASSROOM
WAS IN THE 22ND PERCENTILE

748

00:27:58,566 --> 00:28:00,133

IN THE STATE OF CALIFORNIA

749

00:28:00,133 --> 00:28:01,933

AMONGST NINTH GRADE
ALGEBRA CLASSROOMS.

750

00:28:01,933 --> 00:28:03,400

AND THEN THIS PAST YEAR,

751

00:28:03,400 --> 00:28:05,333

THEY WERE JUST
IN THE 99TH PERCENTILE

752

00:28:05,333 --> 00:28:06,833

IN THE STATE OF CALIFORNIA

753

00:28:06,833 --> 00:28:08,333

AMONGST NINTH GRADE
ALGEBRA CLASSROOMS.

754

00:28:08,333 --> 00:28:10,200

I THINK THERE'S ONLY
NINE CLASSROOMS IN THE STATE

755

00:28:10,200 --> 00:28:11,666

THAT OUTPERFORM THEM.

756

00:28:11,666 --> 00:28:14,800

AND WHAT'S BEEN NEAT
ABOUT THIS--

757

00:28:14,800 --> 00:28:16,600

I MEAN, OBVIOUSLY, YOU KNOW,
EVERYONE ALWAYS TALKS

758

00:28:16,600 --> 00:28:19,266
ABOUT TEST SCORES, AND CLEARLY
THE TEST SCORES WERE GOOD.

759

00:28:19,266 --> 00:28:21,266
BUT WHAT PETER MENTIONS IS,
"LOOK, THE TEST SCORES--

760

00:28:21,266 --> 00:28:23,566
THAT'S ALL NICE,
AND MATH LEARNING IS NICE,"

761

00:28:23,566 --> 00:28:25,166
BUT HE VIEWS THAT
AS REALLY A PRETEXT,

762

00:28:25,166 --> 00:28:27,233
THAT THE MORE POWERFUL THING
THAT HAPPENED IS

763

00:28:27,233 --> 00:28:29,200
THESE WERE STUDENTS
WHO CAME IN DISENGAGED

764

00:28:29,200 --> 00:28:31,400
THINKING THAT THEY WEREN'T GOOD
IN MATH, LIKE MY COUSIN,

765

00:28:31,400 --> 00:28:33,833
LIKE NADIA,
AND THEY WERE VERY PASSIVE.

766

00:28:33,833 --> 00:28:35,233
"HEY, TEACHER,
TELL ME HOW TO DO IT.

767

00:28:35,233 --> 00:28:37,466

WHAT DO I HAVE TO DO? DO I HAVE
TO MEMORIZE THAT FOR THE EXAM?"

768

00:28:37,466 --> 00:28:39,300

THEY WOULD LOOK AT A PROBLEM
FOR FIVE SECONDS AND SAY,

769

00:28:39,300 --> 00:28:41,666

"OH, I DON'T KNOW HOW TO
DO THAT. I'M NOT GOOD IN MATH."

770

00:28:41,666 --> 00:28:43,600

BUT BY ALLOWING THEM
TO MOVE AT THEIR OWN PACE

771

00:28:43,600 --> 00:28:45,533

AND BY ALLOWING THEM
TO SET THEIR OWN GOALS

772

00:28:45,533 --> 00:28:48,500

AND REALLY
KIND OF SHOWING THEM

773

00:28:48,500 --> 00:28:50,533

THAT MASTERY IS IMPORTANT,
IT'S NOT ENOUGH

774

00:28:50,533 --> 00:28:52,533

TO JUST SUPERFICIALLY
UNDERSTAND SOMETHING,

775

00:28:52,533 --> 00:28:55,033

IT GAVE THEM OWNERSHIP
OVER THEIR OWN LEARNING.

776

00:28:55,033 --> 00:28:56,966

AND WHEN YOU GAVE THEM OWNERSHIP
OVER THEIR OWN LEARNING,

777

00:28:56,966 --> 00:28:59,000

IT CHANGED THEIR MIND-SETS
FOR THE REST OF THEIR LIFE.

778

00:28:59,000 --> 00:29:02,266
AND THAT OWNERSHIP IS
PROBABLY A MORE IMPORTANT SKILL

779

00:29:02,266 --> 00:29:04,400
THAN ANY OF THE ALGEBRA,
AND THAT PAYS DIVIDENDS,

780

00:29:04,400 --> 00:29:06,066
NOT JUST
IN THE OTHER CLASSES,

781

00:29:06,066 --> 00:29:09,400
BUT OBVIOUSLY AS YOU GO
INTO CAREERS AND WHATEVER ELSE.

782

00:29:09,400 --> 00:29:11,866
NOW, EVERYTHING
THAT I'VE TALKED ABOUT SO FAR

783

00:29:11,866 --> 00:29:15,000
HAS BEEN KIND OF A--

784

00:29:15,000 --> 00:29:18,466
WELL, THIS HAS BEEN
THE CLASSROOM ENVIRONMENT,

785

00:29:18,466 --> 00:29:21,000
BUT OBVIOUSLY,
OUT OF THE 10 MILLION STUDENTS,

786

00:29:21,000 --> 00:29:22,166
NOT ALL OF THEM
ARE IN CLASSROOMS.

787

00:29:22,166 --> 00:29:24,233
LIKE, 9 MILLION ARE JUST

INDEPENDENT LEARNERS.

788

00:29:24,233 --> 00:29:26,533

AND THIS NEXT VIDEO
IS A GOOD EXAMPLE

789

00:29:26,533 --> 00:29:29,100

OF JUST HOW MUCH POTENTIAL
THERE IS OUT THERE

790

00:29:29,100 --> 00:29:33,066

IF WE JUST LET PEOPLE
TAP INTO IT.

791

00:29:33,066 --> 00:29:36,666

- SO I ACTUALLY DROPPED OUT
OF HIGH SCHOOL TWICE,

792

00:29:36,666 --> 00:29:39,633

BOTH DURING
MY FRESHMAN YEAR.

793

00:29:39,633 --> 00:29:41,700

AND WHEN I EVENTUALLY
CAME BACK,

794

00:29:41,700 --> 00:29:44,533

I WAS PUT IN, SORT OF, LOWER
LEVEL MATH AND SCIENCE CLASSES

795

00:29:44,533 --> 00:29:47,666

BECAUSE I WAS SO BEHIND.

796

00:29:47,666 --> 00:29:50,266

THEN I DISCOVERED
KHAN ACADEMY,

797

00:29:50,266 --> 00:29:52,600

AND I WAS ABLE TO SKIP
TWO YEARS' WORTH OF MATH

798

00:29:52,600 --> 00:29:54,866

JUST THROUGH
USING THE SITE.

799

00:29:54,866 --> 00:29:57,633

AND I CAME INTO SCHOOL,
I TOOK THE EXAM

800

00:29:57,633 --> 00:29:59,633

WITH STUDENTS WHO HAD BEEN
ENROLLED IN THE CLASS ALL YEAR,

801

00:29:59,633 --> 00:30:01,666

AND I WAS ACTUALLY ABLE TO GET
THE HIGHEST

802

00:30:01,666 --> 00:30:05,933

OR THE SECOND HIGHEST SCORES
IN THE CLASS.

803

00:30:05,933 --> 00:30:09,066

SO FOR ME, KHAN ACADEMY
REALLY CHANGED THE TRAJECTORY

804

00:30:09,066 --> 00:30:10,800

OF MY ENTIRE LIFE,

805

00:30:10,800 --> 00:30:12,500

BECAUSE WITHOUT IT,

806

00:30:12,500 --> 00:30:14,766

I DON'T THINK I EVER REALLY
WOULD HAVE BEEN INSPIRED

807

00:30:14,766 --> 00:30:18,400

TO LEARN AND TO LOVE MATH
AND TO LOVE SCIENCE.

808

00:30:19,866 --> 00:30:22,000

I ENDED UP GRADUATING
AS THE VALEDICTORIAN

809

00:30:22,000 --> 00:30:23,833

AND GOING ON TO PRINCETON,

810

00:30:23,833 --> 00:30:25,800

WHERE I'M NOW

A COMPUTER SCIENCE MAJOR.

811

00:30:25,800 --> 00:30:29,333

AND I'M ABSOLUTELY PASSIONATE
ABOUT LEARNING,

812

00:30:29,333 --> 00:30:32,500

ABOUT COMPUTERS,
ABOUT MATH, ABOUT SCIENCE.

813

00:30:32,500 --> 00:30:33,933

AND WITHOUT KHAN ACADEMY,

814

00:30:33,933 --> 00:30:36,033

I DON'T THINK THAT THESE THINGS
WOULD REALLY MATTER TO ME

815

00:30:36,033 --> 00:30:38,400

THE WAY THAT THEY DO TODAY.

816

00:30:38,400 --> 00:30:40,666

SO I'D JUST LIKE TO SAY
A MASSIVE THANK-YOU

817

00:30:40,666 --> 00:30:44,600

TO EVERYONE AT KHAN ACADEMY,
SAL AND THE TEAM.

818

00:30:44,600 --> 00:30:46,233

PLEASE KEEP DOING THE GOOD WORK
THAT YOU'RE DOING

819

00:30:46,233 --> 00:30:49,166

BECAUSE YOU'RE REALLY
CHANGING LIVES.

820

00:30:51,100 --> 00:30:54,100

- SO--

[applause]

821

00:30:56,566 --> 00:30:59,033

SO THIS ACTUALLY GOT
EVEN MORE INTERESTING.

822

00:30:59,033 --> 00:31:00,533

SO WHEN WE FOUND OUT

823

00:31:00,533 --> 00:31:02,700

THAT CHARLIE IS
A COMPUTER SCIENCE MAJOR,

824

00:31:02,700 --> 00:31:04,433

WE SAID, "YOU KNOW,
WE HAVE INTERNSHIPS."

825

00:31:04,433 --> 00:31:06,500

[laughter]

AND SO HE INTERVIEWED

826

00:31:06,500 --> 00:31:08,533

FOR THE INTERNSHIPS, AND HE DID
VERY WELL IN THE INTERVIEW,

827

00:31:08,533 --> 00:31:10,500

ACTUALLY, SO WELL THAT A COUPLE
OF PEOPLE WHO INTERVIEWED HIM

828

00:31:10,500 --> 00:31:12,166

SAID, LIKE, "WHO IS THIS GUY?
YOU KNOW, HE'S REALLY JUST

829

00:31:12,166 --> 00:31:14,233
ROCKING ALL THE ROUNDS
OF THE INTERVIEWS."

830

00:31:14,233 --> 00:31:15,700
AND I SAID, YOU KNOW,
"WHY ARE YOU SURPRISED?"

831

00:31:15,700 --> 00:31:16,900
WE EDUCATED HIM."

832

00:31:16,900 --> 00:31:18,233
[laughter]

833

00:31:18,233 --> 00:31:21,700
BUT HE ACTUALLY GOT OFFERED,
ACCEPTED THE INTERVIEW,

834

00:31:21,700 --> 00:31:23,766
AND NOW HE'S INTERNING
WITH US THIS SUMMER.

835

00:31:23,766 --> 00:31:26,833
AND HE'S ACTUALLY HERE, SO--
YEAH. YOU WANT TO STAND UP?

836

00:31:26,833 --> 00:31:29,633
ACTUALLY, CHARLIE, YOU WANT TO--
YEAH, YEAH, YEAH.

837

00:31:29,633 --> 00:31:32,633
[applause]

838

00:31:36,566 --> 00:31:38,433
THIS IS ACTUALLY THE FIRST TIME
THAT I'M LIKE,

839

00:31:38,433 --> 00:31:40,933
"WAIT, CHARLIE'S IN THE ROOM.

I SHOULD, LIKE"--

840

00:31:40,933 --> 00:31:44,066

I'M ALWAYS--ACTUALLY,
ALL THE PEOPLE AT KHAN ACADEMY,

841

00:31:44,066 --> 00:31:45,533

WHY DON'T YOU STAND UP,
JUST SO EVERYONE--

842

00:31:45,533 --> 00:31:48,466

WE HAVE A BUNCH OF INTERNS AND
NEW FOLKS THAT WE ALL INVITED.

843

00:31:48,466 --> 00:31:51,466

SO AS YOU CAN--

[applause]

844

00:31:57,133 --> 00:31:59,100

AS YOU CAN TELL, I ALWAYS LIKE
TO PACK THE AUDIENCE

845

00:31:59,100 --> 00:32:01,800

WITH FRIENDLY PEOPLE
SO THAT I CAN

846

00:32:01,800 --> 00:32:04,000

MAXIMIZE THE--

847

00:32:06,666 --> 00:32:07,933

SO THIS IS SOMETHING
THAT SOME OF YOU ALL

848

00:32:07,933 --> 00:32:09,133

MIGHT HAVE HEARD ABOUT.

849

00:32:09,133 --> 00:32:11,166

COLLEGE BOARD,
MAKERS OF THE S.A.T.,

850

00:32:11,166 --> 00:32:13,433

ABOUT TWO MONTHS AGO ANNOUNCED
THAT THEY'RE GONNA CREATE

851

00:32:13,433 --> 00:32:15,733

A NEW S.A.T. IN 2016
THAT'S MORE ALIGNED

852

00:32:15,733 --> 00:32:17,466

WITH WHAT STUDENTS
ACTUALLY LEARN IN SCHOOL

853

00:32:17,466 --> 00:32:20,666

AND IS MORE CORRELATED
WITH BEING PREPARED FOR COLLEGE.

854

00:32:20,666 --> 00:32:23,166

BUT AS PART OF THAT,
THEY FINALLY RECOGNIZED

855

00:32:23,166 --> 00:32:25,900

WHAT EVERYONE HAS ALWAYS
RECOGNIZED FOR MANY DECADES NOW,

856

00:32:25,900 --> 00:32:27,633

IS THAT THERE'S BEEN
THIS PERCEIVED

857

00:32:27,633 --> 00:32:30,300

AND MAYBE ACTUAL INEQUITY
IN PREPARING

858

00:32:30,300 --> 00:32:32,200

FOR THESE TYPES
OF HIGH-STAKES TESTS.

859

00:32:32,200 --> 00:32:34,300

YOU HAVE THIS WHOLE
MULTIBILLION-DOLLAR INDUSTRY

860

00:32:34,300 --> 00:32:36,466

AROUND TEST PREP
THAT THE MIDDLE CLASS

861

00:32:36,466 --> 00:32:37,766

AND UPPER-MIDDLE CLASS
CAN AFFORD,

862

00:32:37,766 --> 00:32:39,700

BUT THE PEOPLE WHO NEED IT
THE MOST CAN'T.

863

00:32:39,700 --> 00:32:41,600

AND SO THEY DECIDED--

864

00:32:41,600 --> 00:32:43,633

THEY'VE NEVER DONE ANYTHING
LIKE THIS--TO PARTNER WITH US

865

00:32:43,633 --> 00:32:46,900

TO CREATE FREE TEST PREP.

866

00:32:46,900 --> 00:32:48,833

AND WHAT'S EXCITING
ABOUT THIS

867

00:32:48,833 --> 00:32:51,166

ON BOTH SIDES
OF THE RELATIONSHIP IS,

868

00:32:51,166 --> 00:32:53,666

YOU KNOW, THE REASON WHY
THEY PARTNERED WITH US

869

00:32:53,666 --> 00:32:55,800

IS BECAUSE THEY DIDN'T--
THEY WANTED TO DO TEST PREP

870

00:32:55,800 --> 00:32:57,333

ON A MUCH DEEPER LEVEL.

871

00:32:57,333 --> 00:32:59,066

IT'S HISTORICALLY BEEN
ASSOCIATED WITH

872

00:32:59,066 --> 00:33:02,166

FAMILIARITY WITH EXAMS, HERE ARE
SOME TEST-TAKING STRATEGIES,

873

00:33:02,166 --> 00:33:04,300

HERE'S HOW YOU GUESS,
HERE'S HOW YOU CRAM.

874

00:33:04,300 --> 00:33:06,033

BUT THEY RECOGNIZE
THAT WE'RE NOT ABOUT THAT.

875

00:33:06,033 --> 00:33:08,166

YOU KNOW, WE'RE LITERALLY
ABOUT BUILDING YOUR FOUNDATIONS,

876

00:33:08,166 --> 00:33:10,666

MASTERING CONCEPTS,
NOT SOMEHOW COVERING

877

00:33:10,666 --> 00:33:12,300

YOUR SUPERFICIAL WEAKNESSES.

878

00:33:12,300 --> 00:33:14,100

AND SO WHAT WE'RE
GONNA BE BUILDING TOGETHER--

879

00:33:14,100 --> 00:33:15,833

AND IT'S A VERY,
VERY CLOSE RELATIONSHIP--

880

00:33:15,833 --> 00:33:19,066

IS, YOU KNOW,
NOT JUST FREE TEST PREP,

881

00:33:19,066 --> 00:33:21,700

BUT LITERALLY THE BEST TEST PREP
THAT HAPPENS TO BE FREE,

882

00:33:21,700 --> 00:33:24,433

AND NOT JUST
ABOUT FAMILIARITY WITH EXAMS

883

00:33:24,433 --> 00:33:26,666

OR WHAT YOU DO IN THE WEEK
OR TWO BEFORE THE EXAM.

884

00:33:26,666 --> 00:33:29,500

BUT WHEREVER YOU ARE,
HOWEVER YOU START,

885

00:33:29,500 --> 00:33:30,966

WHATEVER AGE YOU ARE,
WE CAN GET YOU

886

00:33:30,966 --> 00:33:33,866

TO WHATEVER KNOWLEDGE STATE
THAT YOU WANT TO GET TO.

887

00:33:35,833 --> 00:33:39,166

WE ALSO HAVE A PARTNERSHIP
WITH NASA,

888

00:33:39,166 --> 00:33:40,700

WHICH I THOUGHT WOULD BE FUN
TO MENTION HERE.

889

00:33:40,700 --> 00:33:44,966

[applause]

THIS IS--

890

00:33:44,966 --> 00:33:47,033

SO THERE'S A WHOLE SERIES
OF CONTENT

891

00:33:47,033 --> 00:33:49,033
ON KHAN ACADEMY NOW,

892

00:33:49,033 --> 00:33:51,966
SIMULATIONS AND VIDEOS ON,
YOU KNOW--

893

00:33:51,966 --> 00:33:54,333
AND I HAD DONE A WHOLE SERIES
ON COSMOLOGY EVEN BEFORE,

894

00:33:54,333 --> 00:33:56,466
BUT NOW, WE HAVE
SOME REAL NASA CONTENT

895

00:33:56,466 --> 00:33:58,266
ON, YOU KNOW, HOW TO--
YOU KNOW, MISSION TO MARS,

896

00:33:58,266 --> 00:34:00,133
HOW DO YOU FIGURE OUT HOW FAR
A STAR AWAY--

897

00:34:00,133 --> 00:34:01,866
A STAR IS
AND THINGS LIKE THAT.

898

00:34:01,866 --> 00:34:05,400
SO THERE'S A, YOU KNOW,
VERY, VERY EXCITING PARTNERSHIP.

899

00:34:05,400 --> 00:34:06,633
OBVIOUSLY,
TO SOME DEGREE--

900

00:34:06,633 --> 00:34:09,466
I MEAN, I WAS JUST SPEAKING
TO THE FOLKS HERE,

901
00:34:09,466 --> 00:34:12,166
YOU KNOW, NASA'S MISSION IS--
YOU KNOW,

902
00:34:12,166 --> 00:34:13,866
IT'S OBVIOUSLY
ABOUT EXPLORING SPACE,

903
00:34:13,866 --> 00:34:16,466
BUT IT'S ALSO ABOUT EDUCATING,
ESPECIALLY IN STEM,

904
00:34:16,466 --> 00:34:18,466
TO MAKE SURE THAT WE HAVE
THE TALENT

905
00:34:18,466 --> 00:34:20,866
SO THAT WE CAN
EXPLORE SPACE.

906
00:34:23,100 --> 00:34:24,966
SO EVERYTHING
I'VE TALKED ABOUT SO FAR

907
00:34:24,966 --> 00:34:26,766
HAS BEEN THE WORLD
THAT MOST OF US LIVE IN,

908
00:34:26,766 --> 00:34:28,766
THE ENGLISH-SPEAKING WORLD,
THE DEVELOPED WORLD.

909
00:34:28,766 --> 00:34:30,733
MANY OF YOU ALL
MIGHT BE THINKING,

910
00:34:30,733 --> 00:34:32,366
WELL, YOU KNOW, WHAT
ABOUT THE REST OF THE PLANET?

911
00:34:32,366 --> 00:34:35,000
MAYBE THEY COULD EVEN BENEFIT
MORE FROM SOMETHING LIKE THIS.

912
00:34:35,000 --> 00:34:37,766
AND, YOU KNOW,
AS EARLY AS 2007,

913
00:34:37,766 --> 00:34:40,933
THERE WERE FOLKS
TAKING KHAN ACADEMY ON,

914
00:34:40,933 --> 00:34:43,900
YOU KNOW, THE VIDEOS
OR SOMETIMES EVEN THE SOFTWARE,

915
00:34:43,900 --> 00:34:45,266
AND TAKING THEM
ALL OVER THE WORLD

916
00:34:45,266 --> 00:34:47,166
ON THUMB DRIVES
AND SOMETIMES ON COMPUTERS

917
00:34:47,166 --> 00:34:49,033
AND MAYBE SOMETIMES
SETTING UP BROADBAND,

918
00:34:49,033 --> 00:34:51,333
AND ALL OF THESE ARE
PICTURES OF THOSE OTHER GROUPS,

919
00:34:51,333 --> 00:34:53,266
OTHER NOT-FOR-PROFITS,
OTHER NGOs,

920
00:34:53,266 --> 00:34:55,966
SOMETIMES GOVERNMENTS, TAKING
KHAN ACADEMY OUT TO THE WORLD.

921

00:34:55,966 --> 00:34:58,800

SO THESE ARE ALL KIDS USING
KHAN ACADEMY IN RANDOM PLACES.

922

00:34:58,800 --> 00:35:01,500

AND THEY'RE EACH
PRETTY INCREDIBLE STORIES,

923

00:35:01,500 --> 00:35:03,500

BUT PROBABLY
THE MOST INCREDIBLE ONE

924

00:35:03,500 --> 00:35:05,300

IS THE ONE
ON THE TOP RIGHT.

925

00:35:05,300 --> 00:35:07,300

YOU KNOW, I USED TO GIVE TALKS
LIKE THIS AND JOKE THAT,

926

00:35:07,300 --> 00:35:09,733

YOU KNOW, "MAYBE ONE DAY
THIS WILL BE USED IN MONGOLIA,"

927

00:35:09,733 --> 00:35:11,633

JUST IMAGINING THE FURTHEST
PLACE ON THE PLANET,

928

00:35:11,633 --> 00:35:14,566

AND THEN A FEW MONTHS LATER,
I GET A LETTER FROM MONGOLIA.

929

00:35:14,566 --> 00:35:16,566

AND IT'S THE YOUNG WOMAN
ON THE TOP RIGHT.

930

00:35:16,566 --> 00:35:19,033

HER NAME'S ZAYA, AND, YOU KNOW,
SHE HAD A--

931
00:35:19,033 --> 00:35:21,300
AN EMAIL
AND THEN A LINK TO A VIDEO,

932
00:35:21,300 --> 00:35:24,000
AND HER VIDEO IS VERY SIMILAR
TO CHARLIE'S,

933
00:35:24,000 --> 00:35:25,133
SAYING HOW SHE LIKED
KHAN ACADEMY.

934
00:35:25,133 --> 00:35:26,933
IT REALLY HELPED HER IN MATH.

935
00:35:26,933 --> 00:35:28,333
AND IT WAS--
IT WAS A COOL VIDEO,

936
00:35:28,333 --> 00:35:30,166
BUT I IMMEDIATELY ASSUMED
THAT SHE MUST BE MIDDLE CLASS

937
00:35:30,166 --> 00:35:32,266
OR UPPER-MIDDLE CLASS.
HER ENGLISH WAS QUITE GOOD.

938
00:35:32,266 --> 00:35:34,500
SHE HAD ACCESS
TO THE INTERNET AND A COMPUTER.

939
00:35:34,500 --> 00:35:37,333
BUT THEN I READ THE TEXT
OF THE EMAIL MORE CAREFULLY,

940
00:35:37,333 --> 00:35:39,433
AND IT TURNED OUT THAT THERE WAS
A GROUP OF ENGINEERS

941

00:35:39,433 --> 00:35:41,100
FROM CISCO SYSTEMS

942
00:35:41,100 --> 00:35:43,033
THAT WERE USING
THEIR VACATION TIME

943
00:35:43,033 --> 00:35:45,866
TO GO TO MONGOLIA
AND SET UP COMPUTER LABS

944
00:35:45,866 --> 00:35:48,266
WITH BROADBAND IN ORPHANAGES.

945
00:35:48,266 --> 00:35:50,666
AND SO WHAT YOU SEE
IN THE TOP RIGHT THERE,

946
00:35:50,666 --> 00:35:53,600
THOSE ARE THE ACTUAL
ORPHAN GIRLS USING KHAN ACADEMY,

947
00:35:53,600 --> 00:35:57,033
AND ZAYA WAS--IS--WAS
ONE OF THOSE ORPHAN GIRLS.

948
00:35:57,033 --> 00:35:58,500
AND THAT, BY ITSELF,
WAS, LIKE,

949
00:35:58,500 --> 00:36:00,233
YOU KNOW, SOMETHING
OUT OF A SCIENCE FICTION BOOK,

950
00:36:00,233 --> 00:36:03,600
BUT IT GOT EVEN MORE INCREDIBLE,
BECAUSE ZAYA THEN WENT ON

951
00:36:03,600 --> 00:36:06,200
TO BECOME ONE OF

THE TOP CONTRIBUTORS OF CONTENT

952

00:36:06,200 --> 00:36:08,300
IN THE MONGOLIAN LANGUAGE.

953

00:36:08,300 --> 00:36:10,100
AND SO IT'S, YOU KNOW--
I GUESS IT'S VERY SIMILAR

954

00:36:10,100 --> 00:36:11,766
TO CHARLIE'S STORY THAT, YOU
KNOW, HOPEFULLY, SHE BENEFITTED.

955

00:36:11,766 --> 00:36:14,466
THEN SHE'S ABLE TO CONTRIBUTE
TO HELP THE NEXT GENERATION

956

00:36:14,466 --> 00:36:16,566
OF LEARNERS HERE.

957

00:36:18,533 --> 00:36:21,800
WE'RE, ACTIVELY, TO BE ABLE
TO REACH MORE AND MORE PEOPLE

958

00:36:21,800 --> 00:36:24,400
AROUND THE WORLD,
TRANSLATING THE WHOLE PLATFORM,

959

00:36:24,400 --> 00:36:26,000
NOT JUST THE VIDEOS,
BUT THE EXERCISES,

960

00:36:26,000 --> 00:36:28,866
THE DASHBOARDS, EVERYTHING
TO THE WORLD'S MAJOR LANGUAGES.

961

00:36:28,866 --> 00:36:30,633
THIS IS THE SPANISH VERSION
OF KHAN ACADEMY,

962

00:36:30,633 --> 00:36:33,266

WHICH WE LAUNCHED
IN THIS PAST FALL.

963

00:36:33,266 --> 00:36:35,533

WE'VE RECENTLY LAUNCHED
BRAZILIAN PORTUGUESE.

964

00:36:35,533 --> 00:36:37,400

WE'RE LAUNCHING SOON
TURKISH AND FRENCH,

965

00:36:37,400 --> 00:36:38,966

AND OUR GOAL OVER TIME

966

00:36:38,966 --> 00:36:40,766

IS TO DO ALL OF THE WORLD'S
MAJOR LANGUAGES.

967

00:36:40,766 --> 00:36:42,766

AND TO GET A FEELING
FOR WHAT SOME OF THIS--

968

00:36:42,766 --> 00:36:45,133

AT LEAST THE VIDEO CONTENT
FEELS LIKE IN OTHER LANGUAGES,

969

00:36:45,133 --> 00:36:48,300

I'LL SHOW YOU
THIS NEXT VIDEO.

970

00:36:48,300 --> 00:36:51,800

[woman speaking Spanish]

971

00:36:51,800 --> 00:36:53,866

[woman speaking French]

972

00:36:53,866 --> 00:36:56,233

[woman speaking Mandarin]

973

00:36:56,233 --> 00:36:59,700

[man speaking Hindi-Urdu]

974

00:36:59,700 --> 00:37:02,600

[man speaking Arabic]

975

00:37:02,600 --> 00:37:05,266

[man speaking Farsi]

976

00:37:05,266 --> 00:37:08,333

[man speaking Hebrew]

977

00:37:08,333 --> 00:37:11,300

[woman speaking Swahili]

978

00:37:11,300 --> 00:37:14,566

[woman speaking Xhosa]

979

00:37:14,566 --> 00:37:17,533

[man speaking Turkish]

980

00:37:17,533 --> 00:37:20,300

[man speaking Portuguese]

981

00:37:32,366 --> 00:37:33,833

- I WATCH THAT

WHENEVER I GET LAZY.

982

00:37:33,833 --> 00:37:37,033

[laughter]

983

00:37:37,033 --> 00:37:38,900

SO THESE ARE JUST MORE PICTURES
OF KHAN ACADEMY.

984

00:37:38,900 --> 00:37:40,900

I MEAN, WE GET SENT THESE

ALMOST EVERY DAY

985

00:37:40,900 --> 00:37:45,033
OF PICTURES ALL OVER THE WORLD
OF PEOPLE USING KHAN ACADEMY.

986

00:37:45,033 --> 00:37:46,933
AND, YOU KNOW,
WHAT I ALWAYS TELL FOLKS--

987

00:37:46,933 --> 00:37:48,866
I TELL THIS TO THE TEAM
ALMOST ON A WEEKLY BASIS.

988

00:37:48,866 --> 00:37:50,400
I TELL IT TO OUR SUPPORTERS.

989

00:37:50,400 --> 00:37:51,766
I TELL IT
TO ALL OUR STAKEHOLDERS,

990

00:37:51,766 --> 00:37:53,166
AND ONCE AGAIN, YOU KNOW,
YOU SAW SOME OF OUR TEAM.

991

00:37:53,166 --> 00:37:54,466
WE'RE NOW--YOU KNOW,

992

00:37:54,466 --> 00:37:56,300
EVEN IN THE SUMMER,
WE'RE 60 FULL-TIME PEOPLE

993

00:37:56,300 --> 00:37:59,400
AND 20-SOMETHING INTERNS.
WE'VE HAD HUNDREDS,

994

00:37:59,400 --> 00:38:01,400
ACTUALLY THOUSANDS OF PEOPLE
HELP VOLUNTEER

995

00:38:01,400 --> 00:38:04,233
IN TERMS OF HELP SUBTITLE
AND GO OUT INTO THE FIELD.

996

00:38:04,233 --> 00:38:06,133
OBVIOUSLY, THERE'S HUNDREDS
OF THOUSANDS OF TEACHERS

997

00:38:06,133 --> 00:38:07,833
PART OF THIS,
AND WHAT I TELL EVERYONE

998

00:38:07,833 --> 00:38:09,333
WHO'S KIND OF INVOLVED

999

00:38:09,333 --> 00:38:11,600
OR NOT INVOLVED EVEN,
IS THAT, YOU KNOW,

1000

00:38:11,600 --> 00:38:14,266
YOU HEAR THE TERM ONCE-IN-
A-LIFETIME OPPORTUNITY A LOT,

1001

00:38:14,266 --> 00:38:16,166
BUT IN MY MIND,
IT'S MUCH MORE THAN THAT.

1002

00:38:16,166 --> 00:38:17,533
IT'S ACTUALLY MUCH CLOSER

1003

00:38:17,533 --> 00:38:21,100
TO A ONCE-IN-A-MILLENNIUM
OPPORTUNITY WHERE, YOU KNOW,

1004

00:38:21,100 --> 00:38:23,400
WE'RE CLEARLY AT THIS
INFLECTION POINT IN HISTORY,

1005

00:38:23,400 --> 00:38:27,633

PROBABLY ONE THAT'S BIGGER
THAN THE PRINTING PRESS,

1006

00:38:27,633 --> 00:38:29,266

BIGGER THAN
THE INDUSTRIAL REVOLUTION,

1007

00:38:29,266 --> 00:38:31,933

AND PROBABLY WOULD RIVAL
THE ADVENT OF WRITING

1008

00:38:31,933 --> 00:38:34,033

OR THE ADVENT
OF AGRICULTURE.

1009

00:38:34,033 --> 00:38:35,900

AND WHENEVER YOU HAVE
THESE NEW INFLECTION POINTS,

1010

00:38:35,900 --> 00:38:38,900

IT RAISES NEW PROBLEMS
BUT ALSO NEW OPPORTUNITIES.

1011

00:38:38,900 --> 00:38:40,933

AND TO TAKE IT--
TO SOLVE THOSE PROBLEMS,

1012

00:38:40,933 --> 00:38:44,166

IT ALSO KIND OF BRINGS ABOUT
NEW INSTITUTIONS.

1013

00:38:44,166 --> 00:38:45,633

AND IT WAS KIND OF
A DELUSIONAL DREAM

1014

00:38:45,633 --> 00:38:48,966

WHEN I WAS A GUY OPERATING IN
A CLOSET HERE IN MOUNTAIN VIEW,

1015

00:38:48,966 --> 00:38:50,300

BUT NOW IT SEEMS
A LITTLE BIT LESS DELUSIONAL,

1016
00:38:50,300 --> 00:38:51,900
THAT OUR HOPE IS THAT
KHAN ACADEMY

1017
00:38:51,900 --> 00:38:54,333
CAN BE AN INSTITUTION THAT,
OVER THE NEXT DECADE,

1018
00:38:54,333 --> 00:38:57,800
50 YEARS, YOU KNOW,
100 YEARS, 500 YEARS,

1019
00:38:57,800 --> 00:39:00,533
CAN TAKE THIS THING
CALLED EDUCATION

1020
00:39:00,533 --> 00:39:02,900
AND, YOU KNOW, THIS THING THAT'S
FUNDAMENTALLY BEEN SCARCE,

1021
00:39:02,900 --> 00:39:04,433
THAT'S FUNDAMENTALLY BEEN
THE DETERMINANT

1022
00:39:04,433 --> 00:39:07,166
BETWEEN THOSE WHO SUCCEED
AND THOSE WHO DON'T

1023
00:39:07,166 --> 00:39:09,100
AND MAKE IT
MORE UBIQUITOUS,

1024
00:39:09,100 --> 00:39:11,900
LIKE CLEAN DRINKING WATER
AND SHELTER,

1025
00:39:11,900 --> 00:39:14,300

AND REALLY,
JUST A FUNDAMENTAL HUMAN RIGHT.

1026
00:39:14,300 --> 00:39:15,833
THANK YOU.

1027
00:39:15,833 --> 00:39:18,600
[applause]

1028
00:39:36,966 --> 00:39:39,666
- SO WE HAVE TIME
FOR A FEW QUESTIONS.

1029
00:39:39,666 --> 00:39:41,933
IF YOU HAVE A QUESTION,
PLEASE RAISE YOUR HAND.

1030
00:39:41,933 --> 00:39:45,433
WAIT FOR THE MICROPHONE,
AND WHEN YOU GET IT, STAND UP.

1031
00:39:45,433 --> 00:39:47,333
THANK YOU.

1032
00:39:47,333 --> 00:39:48,800
- I HAVE A QUESTION BACK HERE,
SAL.

1033
00:39:48,800 --> 00:39:50,966
HELLO. HI, SAL.
- OH, YES.

1034
00:39:50,966 --> 00:39:54,033
- SO I HAVE A QUESTION
ABOUT THE DISCONNECT

1035
00:39:54,033 --> 00:39:56,133
BETWEEN WHAT
WE'RE TEACHING PEOPLE...

1036

00:39:56,133 --> 00:39:58,033

- MM-HMM.

- AND WHAT WE--

1037

00:39:58,033 --> 00:40:00,100

WHAT PEOPLE ACTUALLY DO
IN THE REAL WORLD.

1038

00:40:00,100 --> 00:40:01,733

- YEAH.

- AND SO ONE OF THE RESTRICTIONS

1039

00:40:01,733 --> 00:40:04,866

IS, I'M SURE YOU WELL KNOW,
IS THAT WE HAVE TO HAVE THINGS

1040

00:40:04,866 --> 00:40:06,800

THAT WE CAN MEASURE
WHEN WE'RE IN SCHOOL.

1041

00:40:06,800 --> 00:40:09,666

SO WE HAVE
THIS SORT OF MONITORY,

1042

00:40:09,666 --> 00:40:12,733

HOW DO YOU DECIDE
IF YOU'VE SUCCEEDED OR FAILED?

1043

00:40:12,733 --> 00:40:14,266

BUT WHEN YOU GO
INTO THE REAL WORLD,

1044

00:40:14,266 --> 00:40:16,333

IT'S QUITE A DIFFERENT STORY,
AND YOU WELL KNOW THAT, RIGHT?

1045

00:40:16,333 --> 00:40:17,333

- YEAH.

- AND DEPENDING

1046

00:40:17,333 --> 00:40:18,900

ON YOUR PROFESSION,

1047

00:40:18,900 --> 00:40:21,533

YOU HAVE TO HAVE

SOME VERY DIFFERENT TOOLS.

1048

00:40:21,533 --> 00:40:23,800

AND MANY TIMES,

IT'S SOCIAL TOOLS,

1049

00:40:23,800 --> 00:40:26,233

RATHER THAN

THE KIND OF EDUCATIONAL TOOLS

1050

00:40:26,233 --> 00:40:28,333

THAT WE LEARN

IN OUR SCHOOLS.

1051

00:40:28,333 --> 00:40:29,566

I'M SURE YOU'RE WELL AWARE

OF THIS,

1052

00:40:29,566 --> 00:40:32,466

AND I JUST WANTED TO HEAR YOU

SPEAK ABOUT IT.

1053

00:40:32,466 --> 00:40:33,866

- YEAH.

NO, YOU'RE ABSOLUTELY RIGHT.

1054

00:40:33,866 --> 00:40:36,233

YOU'RE ABSOLUTELY RIGHT,

AND, YOU KNOW,

1055

00:40:36,233 --> 00:40:37,633

THE WAY I THINK ABOUT IT--

1056

00:40:37,633 --> 00:40:39,800

AND I'VE WRITTEN A LITTLE BIT
ABOUT THIS IN MY BOOK--

1057

00:40:39,800 --> 00:40:44,066

IS, YOU KNOW, EDUCATION IS
THIS HUGE SPECTRUM OF THINGS.

1058

00:40:44,066 --> 00:40:46,200

THAT, YOU KNOW, AT THIS END
RIGHT OVER HERE,

1059

00:40:46,200 --> 00:40:47,900

I GUESS YOU COULD THINK
OF YOUR MOST ROTE THINGS--

1060

00:40:47,900 --> 00:40:49,466

THIS IS
YOUR MULTIPLICATION TABLES

1061

00:40:49,466 --> 00:40:51,400

AND YOUR GRAMMAR
AND YOUR VOCABULARY--

1062

00:40:51,400 --> 00:40:52,933

AND THEN AS YOU GO FURTHER
AND FURTHER IN THIS DIRECTION,

1063

00:40:52,933 --> 00:40:54,266

IT BECOMES
MORE AND MORE OPEN-ENDED.

1064

00:40:54,266 --> 00:40:57,833

THIS IS CREATIVITY.
THIS IS COMMUNICATION SKILLS.

1065

00:40:57,833 --> 00:40:59,866

THIS IS
DEALING WITH COMPLEXITY.

1066

00:40:59,866 --> 00:41:02,300

AND, YOU KNOW,
FOR BETTER OR FOR WORSE,

1067
00:41:02,300 --> 00:41:04,500
PROBABLY BECAUSE OF EXACTLY
THE REASON YOU POINT OUT,

1068
00:41:04,500 --> 00:41:06,200
BECAUSE OF ITS MEASURABILITY,

1069
00:41:06,200 --> 00:41:08,800
THE TRADITIONAL SYSTEM
HAS BEEN FOCUSED RIGHT HERE.

1070
00:41:08,800 --> 00:41:10,066
IT'S--YOU KNOW,
NOT JUST ON ROTE THINGS.

1071
00:41:10,066 --> 00:41:11,600
IT'S DONE
SOME MORE OPEN-ENDED THINGS,

1072
00:41:11,600 --> 00:41:13,800
BUT IT'S, FOR THE MOST PART,
THIS SPECTRUM RIGHT OVER HERE,

1073
00:41:13,800 --> 00:41:15,733
KIND OF SQUEEZING OUT TIME
FOR SOME OF THE STUFF

1074
00:41:15,733 --> 00:41:17,433
THAT MIGHT BE
EVEN MORE IMPORTANT,

1075
00:41:17,433 --> 00:41:19,200
BUT IT'S VERY HARD
TO MEASURE.

1076
00:41:19,200 --> 00:41:21,266
AND SO, YOU KNOW,

WHEN WE ENVISION

1077

00:41:21,266 --> 00:41:23,466

WHAT THE SCHOOL
OF THE FUTURE SHOULD LOOK LIKE,

1078

00:41:23,466 --> 00:41:26,133

IS YOU TACKLE A LOT
OF WHAT I WOULD CALL

1079

00:41:26,133 --> 00:41:28,233

YOUR FOUNDATIONAL,
YOUR CORE LEARNING--

1080

00:41:28,233 --> 00:41:30,133

AND EVEN THERE, I AGREE,
IT'S COMPLETELY UP FOR DEBATE.

1081

00:41:30,133 --> 00:41:32,466

SHOULD YOU BE LEARNING CALCULUS
INSTEAD OF STATISTICS?

1082

00:41:32,466 --> 00:41:35,266

SHOULD YOU BE LEARNING,
YOU KNOW, CIVICS AND LAW?

1083

00:41:35,266 --> 00:41:37,800

IT'S NOT PART
OF THE TRADITIONAL CURRICULUM.

1084

00:41:37,800 --> 00:41:41,700

BUT THAT CORE FOUNDATION
YOU CAN GET MORE EFFICIENTLY

1085

00:41:41,700 --> 00:41:43,366

THROUGH SOMETHING LIKE--

1086

00:41:43,366 --> 00:41:45,433

THROUGH SOMETHING LIKE
A KHAN ACADEMY--

1087

00:41:45,433 --> 00:41:47,900

LEARNING AT YOUR OWN PACE,
LEARNING AT YOUR OWN TIME.

1088

00:41:47,900 --> 00:41:49,733

BUT WHAT THE GOAL IS,
IS IT REALLY SHOULD FREE UP

1089

00:41:49,733 --> 00:41:52,800

MOST OF THE CLASS DAY, MOST
OF YOUR LEARNING EXPERIENCE,

1090

00:41:52,800 --> 00:41:56,366

TO BE FOCUSED ON BEING ABLE TO,
YOU KNOW, DEAL--

1091

00:41:56,366 --> 00:41:59,400

YOU KNOW, WORK ON A PROJECT,
DO SOCRATIC DIALOGUE,

1092

00:41:59,400 --> 00:42:00,800

DEALING WITH COMPLEXITY,
WHATEVER IT MIGHT BE.

1093

00:42:00,800 --> 00:42:02,066

AND FRANKLY,
THOSE ARE THE THINGS

1094

00:42:02,066 --> 00:42:04,100

THAT I THINK PEOPLE
SHOULD BE EVALUATED ON.

1095

00:42:04,100 --> 00:42:05,433

YOU KNOW, WHERE ARE YOU?

1096

00:42:05,433 --> 00:42:07,833

AND IF, IN MY MIND,
THE CREDENTIAL OF THE FUTURE

1097

00:42:07,833 --> 00:42:09,600

IS GOING TO LOOK LIKE--
AND I MEAN, THE REALITY IS,

1098

00:42:09,600 --> 00:42:10,833

IT'S ALREADY
THE CREDENTIAL OF TODAY,

1099

00:42:10,833 --> 00:42:12,533

IT'S JUST
NEVER BEEN RECOGNIZED.

1100

00:42:12,533 --> 00:42:14,333

YES, YOUR TEST SCORES AND STUFF,
THEY'RE, YOU KNOW--

1101

00:42:14,333 --> 00:42:16,266

THEY'RE A MEASURE
OF YOUR CRITICAL THINKING SKILLS

1102

00:42:16,266 --> 00:42:18,200

AND YOUR READING COMPREHENSION
SKILLS AND WHATEVER ELSE,

1103

00:42:18,200 --> 00:42:21,000

BUT THAT'S ONLY ONE PART
OF WHO YOU ARE.

1104

00:42:21,000 --> 00:42:23,066

THE MORE IMPORTANT PARTS ARE
YOUR PORTFOLIO OF WORK

1105

00:42:23,066 --> 00:42:24,733

THAT YOU'VE CREATED.

1106

00:42:24,733 --> 00:42:26,533

SO YOU KNOW, RIGHT NOW, IF
YOU'RE AN ARCHITECT OR DESIGNER,

1107

00:42:26,533 --> 00:42:28,433
THEY WALK AROUND
WITH A PORTFOLIO.

1108
00:42:28,433 --> 00:42:30,300
I THINK--IN FACT, I THINK
THAT IT IS ALREADY TRUE

1109
00:42:30,300 --> 00:42:31,533
OF ALMOST ANY CAREER.

1110
00:42:31,533 --> 00:42:32,633
I'VE TOLD, YOU KNOW,
SOME OF MY COUSINS

1111
00:42:32,633 --> 00:42:34,366
WHO ARE NOW,
YOU KNOW, IN COLLEGE,

1112
00:42:34,366 --> 00:42:35,933
I SAID, "LOOK, YOU KNOW,
GET GOOD GRADES,

1113
00:42:35,933 --> 00:42:38,266
HAVE A--GET A GOOD DEGREE,
BUT THE WORK YOU CREATE,

1114
00:42:38,266 --> 00:42:40,666
DOCUMENT IT, BECAUSE THAT'S
GOING TO IMPRESS PEOPLE MORE."

1115
00:42:40,666 --> 00:42:42,166
EVEN WHEN WE'RE HIRING
AT KHAN ACADEMY,

1116
00:42:42,166 --> 00:42:43,933
WE'RE MORE IMPRESSED
IF WE CAN SEE PEOPLE'S WORK.

1117
00:42:43,933 --> 00:42:47,033

AND THEN THE OTHER ASPECT IS
PEER FEEDBACK.

1118
00:42:47,033 --> 00:42:48,133
WHAT DID YOUR PEERS
THINK OF YOU,

1119
00:42:48,133 --> 00:42:49,266
WHAT DID YOUR LEADERS
THINK OF YOU,

1120
00:42:49,266 --> 00:42:51,500
WHAT DID YOUR SUBORDINATES
THINK OF YOU

1121
00:42:51,500 --> 00:42:52,633
WHEN THEY WORKED WITH YOU?

1122
00:42:52,633 --> 00:42:54,666
SO I COMPLETELY AGREE THAT

1123
00:42:54,666 --> 00:42:57,400
THE HOPE IS NOT TO JUST KIND OF
GET INTO THIS REDUCTIONIST,

1124
00:42:57,400 --> 00:42:58,733
YOU KNOW,
CORE SKILLS WORLD,

1125
00:42:58,733 --> 00:43:01,266
BUT TO LET--BUT IF WE CAN TACKLE
THAT MORE EFFICIENTLY

1126
00:43:01,266 --> 00:43:04,233
TO BROADEN
HOW WE EVALUATE PEOPLE.

1127
00:43:04,233 --> 00:43:06,600
- I HAVE A FOLLOW-ON QUESTION
THAT DIRECTLY RELATES

1128

00:43:06,600 --> 00:43:08,466
TO WHAT YOU JUST SAID.

1129

00:43:08,466 --> 00:43:11,000
YOU'RE GOING INTERNATIONAL,

1130

00:43:11,000 --> 00:43:13,666
WHICH MEANS TOTALLY
CROSS-CULTURAL.

1131

00:43:13,666 --> 00:43:14,866
- YEAH.
- AND YOU'RE CREATING

1132

00:43:14,866 --> 00:43:18,000
AN INTERNATIONAL,
A GLOBAL PERSPECTIVE

1133

00:43:18,000 --> 00:43:21,700
ON WHAT CONSTITUTES
AN EDUCATED PERSON.

1134

00:43:21,700 --> 00:43:25,200
HAVE YOU BEEN LOOKING
INTO THE CULTURES OF MONGOLIA

1135

00:43:25,200 --> 00:43:27,700
AND ALL OF ASIA, WHICH ARE
LONG-ESTABLISHED CULTURES...

1136

00:43:27,700 --> 00:43:30,000
- YEAH.
- AND CONSIDERING

1137

00:43:30,000 --> 00:43:32,433
THE IMPLICATIONS CULTURALLY?

1138

00:43:32,433 --> 00:43:33,933

AND I DON'T MEAN
ON A RELIGIOUS SENSE.

1139
00:43:33,933 --> 00:43:35,133
- YEAH, YEAH.
NO, ABSOLUTELY.

1140
00:43:35,133 --> 00:43:37,533
SO, YOU KNOW,
I THINK THE GENERAL IDEA

1141
00:43:37,533 --> 00:43:40,733
IS, YOU KNOW, THE GOOD THING
IS, MATH IS NOT THAT,

1142
00:43:40,733 --> 00:43:42,366
YOU KNOW, DIFFERENT FROM--

1143
00:43:42,366 --> 00:43:44,366
YOU KNOW, OBVIOUSLY, THEY MIGHT
USE DIFFERENT NOTATION,

1144
00:43:44,366 --> 00:43:47,100
DIFFERENT WORDS FOR THINGS,
BUT THERE'S A LOT OF AGREEMENT.

1145
00:43:47,100 --> 00:43:49,233
THAT'S NOT A LOT--IT DOES
BECOME MORE OF AN ISSUE

1146
00:43:49,233 --> 00:43:52,366
AS WE GO INTO SUBJECTIVE
SUBJECTS, ESPECIALLY HISTORY.

1147
00:43:52,366 --> 00:43:53,733
AND WE EVEN--
YOU KNOW, I DID A--

1148
00:43:53,733 --> 00:43:55,900
A FEW YEARS AGO,

THERE WAS AN ARTICLE

1149

00:43:55,900 --> 00:43:57,600
THAT CAME OUT ABOUT--
YOU KNOW, THE CIA

1150

00:43:57,600 --> 00:44:01,533
LITERALLY PUBLISHED DOCUMENTS
ABOUT THEIR INTERVENTION

1151

00:44:01,533 --> 00:44:03,333
IN CHILE TO KIND OF--

1152

00:44:03,333 --> 00:44:05,600
WITH THE ALLENDE REGIME, AND I
THOUGHT THIS WAS FASCINATING.

1153

00:44:05,600 --> 00:44:07,400
I THOUGHT, WELL,
THIS WOULD MAKE A GOOD VIDEO.

1154

00:44:07,400 --> 00:44:09,200
SO I LITERALLY WENT
TO THE PRIMARY DOCUMENTS,

1155

00:44:09,200 --> 00:44:11,333
TALKED ABOUT IT,
UPLOADED IT,

1156

00:44:11,333 --> 00:44:13,200
TRYING TO BE AS OBJECTIVE
AS POSSIBLE,

1157

00:44:13,200 --> 00:44:15,333
TELLING PEOPLE, "LOOK, YOU KNOW,
EVERYONE'S GOT A BIAS,

1158

00:44:15,333 --> 00:44:17,133
SO BE SKEPTICAL."
AND IMMEDIATELY,

1159

00:44:17,133 --> 00:44:18,966

A LOT OF AMERICANS WOULD SAY,
"HEY, THIS WAS A GOOD VIDEO."

1160

00:44:18,966 --> 00:44:20,533

SOME SAID, "OH, YOU COULD HAVE
BEEN A LITTLE BIT--

1161

00:44:20,533 --> 00:44:21,866

YOU KNOW, IT WAS THE COLD WAR.
YOU COULD HAVE BEEN--

1162

00:44:21,866 --> 00:44:24,133

GIVE A LITTLE BIT MORE CREDIT
TO THE CONTEXT."

1163

00:44:24,133 --> 00:44:25,866

BUT THEN SOME CHILEAN STUDENTS
CAME ON AND SAID,

1164

00:44:25,866 --> 00:44:29,800

"YOU ARE AN IMPERIALIST PIG.
YOU HAVE WHITEWASHED HISTORY.

1165

00:44:29,800 --> 00:44:32,266

MY UNCLE DIED
IN THAT INTERVENTION.

1166

00:44:32,266 --> 00:44:33,900

THIS IS
WHAT ACTUALLY HAPPENED."

1167

00:44:33,900 --> 00:44:35,666

AND MY INITIAL REACTION WAS
LIKE, "WOW, YOU KNOW,

1168

00:44:35,666 --> 00:44:37,833

THIS DIDN'T HAPPEN
ON THE ALGEBRA VIDEOS."

1169

00:44:37,833 --> 00:44:39,833

[laughter]

1170

00:44:39,833 --> 00:44:42,366

AND IT ALSO DIDN'T HAPPEN
IN THE HISTORY CLASSES

1171

00:44:42,366 --> 00:44:44,700

THAT I WAS A PART OF,
GROWING UP.

1172

00:44:44,700 --> 00:44:46,366

BUT THEN THE QUESTION IS,
WELL, WHY DIDN'T IT HAPPEN

1173

00:44:46,366 --> 00:44:48,666

IN THE HISTORY CLASSES?
'CAUSE IN A TRADITIONAL--

1174

00:44:48,666 --> 00:44:50,400

YOU KNOW,
IN A TRADITIONAL HISTORY CLASS,

1175

00:44:50,400 --> 00:44:52,800

YOU KNOW, ROOM LIKE THIS, THE
PROFESSOR SAYS WHAT THEY SAY,

1176

00:44:52,800 --> 00:44:55,333

AND PEOPLE TAKE NOTES,
AND THEY KIND OF FEED IT BACK

1177

00:44:55,333 --> 00:44:57,633

TO THE PROFESSOR
ON THE EXAM.

1178

00:44:57,633 --> 00:44:59,833

AND SO I THINK
ONE OF THE BEAUTY--

1179

00:44:59,833 --> 00:45:01,566

ONE OF THE BEAUTIFUL THINGS
ABOUT THE INTERNET

1180

00:45:01,566 --> 00:45:04,066

IS HOW TRANSPARENT IT IS.

1181

00:45:04,066 --> 00:45:06,466

AND YOU CAN'T GET AWAY
WITH EXTREME BIAS,

1182

00:45:06,466 --> 00:45:08,233

BECAUSE SOMEONE'S GOING
TO CALL YOU ON THAT.

1183

00:45:08,233 --> 00:45:12,233

WITH THAT SAID, I THINK IT'S
GOING TO BE, ESPECIALLY HISTORY,

1184

00:45:12,233 --> 00:45:14,400

YOU KNOW, THERE'S A WHOLE SET
OF KIND OF HOT-BUTTON ISSUES

1185

00:45:14,400 --> 00:45:15,766

THROUGHOUT THE WORLD
THAT WE'RE--

1186

00:45:15,766 --> 00:45:17,200

YOU KNOW, WE DON'T WANT TO--
OVER THE LONG-TERM,

1187

00:45:17,200 --> 00:45:18,633

WE DEFINITELY DON'T WANT
TO SHY AWAY FROM THEM

1188

00:45:18,633 --> 00:45:20,866

BECAUSE WE THINK PEOPLE--YOU
KNOW, THIS WILL HELP THE WORLD

1189

00:45:20,866 --> 00:45:22,700
IF MORE PEOPLE
ARE JUST AWARE OF--

1190
00:45:22,700 --> 00:45:23,900
BUT WE WANT TO DO IT
IN AN OBJECTIVE

1191
00:45:23,900 --> 00:45:27,733
AND AS KIND OF
A RESPECTFUL WAY AS POSSIBLE.

1192
00:45:27,733 --> 00:45:29,866
- I'M A FAIRLY NEW PARENT.

1193
00:45:29,866 --> 00:45:31,866
I HAVE
A 2 1/2-YEAR-OLD DAUGHTER,

1194
00:45:31,866 --> 00:45:34,733
AND SHE LOVES YOUTUBE
ON THE IPAD,

1195
00:45:34,733 --> 00:45:37,300
AND WE HAVE TO DOLE IT OUT
AS A REWARD

1196
00:45:37,300 --> 00:45:39,933
FOR CERTAIN THINGS TO HER
TO GET HER TO EAT

1197
00:45:39,933 --> 00:45:42,566
AND TO DO OTHER THINGS.
[laughter]

1198
00:45:42,566 --> 00:45:45,033
SO SCREEN TIME'S A BIG ISSUE
FOR PARENTS.

1199
00:45:45,033 --> 00:45:48,533

AND THEN IT DAWNED ON ME, WHY
AM I HOOKING HER INTO YOUTUBE?

1200

00:45:48,533 --> 00:45:52,566

I SHOULD BE, NOW, HOOKING HER
INTO KHAN ACADEMY.

1201

00:45:52,566 --> 00:45:55,300

- YOU'RE A TIGER DAD.

- [laughs]

1202

00:45:55,300 --> 00:45:58,866

SO I WANTED TO HEAR ANY STORIES
OF THE YOUNGEST KIDS

1203

00:45:58,866 --> 00:46:02,833

WHO ARE USING KHAN ACADEMY
AND WHAT AGE THEY START OFF.

1204

00:46:02,833 --> 00:46:05,833

AND THEN ALSO,
IF YOU YOURSELF HAVE KIDS

1205

00:46:05,833 --> 00:46:08,400

AND IF YOU JUST TELL 'EM,
HEY, GO AND--

1206

00:46:08,400 --> 00:46:10,033

- YES.

- GO GET HELP FROM THE INTERNET

1207

00:46:10,033 --> 00:46:12,033

WITH YOUR HOMEWORK.

- YES.

1208

00:46:12,033 --> 00:46:14,200

SO I DO HAVE KIDS.

I HAVE A FIVE-YEAR-OLD,

1209

00:46:14,200 --> 00:46:16,500

A THREE-YEAR-OLD,
AND A NEGATIVE THREE-MONTH-OLD.

1210
00:46:16,500 --> 00:46:18,333
[laughter]

1211
00:46:18,333 --> 00:46:22,900
A FEW PEOPLE WILL--
[applause]

1212
00:46:22,900 --> 00:46:25,233
IT'S NOT HARD TO DO.
ANYWAY...

1213
00:46:25,233 --> 00:46:28,966
[laughter]

1214
00:46:28,966 --> 00:46:31,866
THE--SO, I MEAN,

1215
00:46:31,866 --> 00:46:33,766
SO MY VIEW ON SCREEN TIME,

1216
00:46:33,766 --> 00:46:35,533
I MEAN, A LOT OF PEOPLE ASK ME
ABOUT THIS,

1217
00:46:35,533 --> 00:46:37,466
AND IT ACTUALLY--
IT WAS FUNNY.

1218
00:46:37,466 --> 00:46:39,366
I WAS ONCE IN A MEETING
OF KIND OF THESE ED LEADERS,

1219
00:46:39,366 --> 00:46:41,066
AND BILL GATES WAS THERE.

1220
00:46:41,066 --> 00:46:42,500

AND YOU KNOW, A BUNCH OF PEOPLE
STARTED GOING ON

1221

00:46:42,500 --> 00:46:44,100
THE WHOLE SCREEN TIME ISSUE
AND THEY'RE LIKE,

1222

00:46:44,100 --> 00:46:46,533
"IS IT HEALTHY FOR KIDS
TO JUST STARE AT SOMETHING?"

1223

00:46:46,533 --> 00:46:48,166
YOU KNOW, EVEN IF
THEY'RE LEARNING A LOT,

1224

00:46:48,166 --> 00:46:50,300
IS IT JUST HEALTHY FOR THEM
TO STARE AT IT FOR, YOU KNOW,

1225

00:46:50,300 --> 00:46:51,700
AN HOUR AT A TIME,
EVEN IF THEY'RE"--

1226

00:46:51,700 --> 00:46:53,233
AND THEN BILL GATES--

1227

00:46:53,233 --> 00:46:55,000
I MEAN, I DON'T KNOW IF HE MEANT
TO BE FUNNY,

1228

00:46:55,000 --> 00:46:56,833
BUT HE SAYS,
"YOU MEAN LIKE A BOOK?"

1229

00:46:56,833 --> 00:46:58,400
AND THEY'RE LIKE,
"OH, THAT'S A GOOD POINT."

1230

00:46:58,400 --> 00:47:01,400
YOU KNOW, BUT I THINK

THERE'S A REAL THING THERE.

1231

00:47:01,400 --> 00:47:03,966

LIKE, I MEAN, I--AND FOR ME,
I DON'T THINK OF IT FROM,

1232

00:47:03,966 --> 00:47:05,633

LIKE, WHAT IS THE LIMIT?

1233

00:47:05,633 --> 00:47:07,333

YOU KNOW, WHAT'S
THE MAXIMUM TIME OR MINIMUM TIME

1234

00:47:07,333 --> 00:47:08,700

OR ANYTHING LIKE THAT.

1235

00:47:08,700 --> 00:47:11,700

I THINK OF IT MUCH MORE OF,
LIKE, IF IT'S--

1236

00:47:11,700 --> 00:47:14,000

AS LONG AS THE KID IS GETTING
THE OTHER IMPORTANT ASPECTS

1237

00:47:14,000 --> 00:47:15,633

OF THEIR LIFE,
THEN THINGS ARE GOOD.

1238

00:47:15,633 --> 00:47:17,866

IF THEY'RE SPENDING
A COUPLE OF HOURS A DAY OUTSIDE

1239

00:47:17,866 --> 00:47:20,766

GETTING TO RUN AROUND, IF THEY
ARE GETTING A COUPLE HOURS A DAY

1240

00:47:20,766 --> 00:47:22,500

INTERACTING WITH PEERS, YOU
KNOW, OR MAYBE THEIR SAME AGE

1241

00:47:22,500 --> 00:47:24,833

OR ABOVE

AND BELOW A LITTLE BIT,

1242

00:47:24,833 --> 00:47:26,266

IF THEY'RE GETTING

SEVERAL HOURS A DAY

1243

00:47:26,266 --> 00:47:27,866

WHERE THEY'RE HAVING

QUALITY TIME WITH A PARENT

1244

00:47:27,866 --> 00:47:31,200

JUST PLAYING AND IMAGINING

AND DOING THINGS,

1245

00:47:31,200 --> 00:47:33,366

THEN, YOU KNOW--

THEN I THINK IT'S FINE.

1246

00:47:33,366 --> 00:47:36,700

IT'S--BUT IF THEY HAVE

NO SCREEN TIME,

1247

00:47:36,700 --> 00:47:38,166

BUT THEY ALSO DON'T GET

TO GO OUTSIDE

1248

00:47:38,166 --> 00:47:40,733

AND THEY DON'T GET QUALITY TIME,

THEN I THINK IT'S--

1249

00:47:40,733 --> 00:47:42,966

YOU KNOW, THAT'S THE WORST

OF ALL THE WORLDS.

1250

00:47:42,966 --> 00:47:45,700

SO I THINK THAT'S THE--YOU KNOW,

AS LONG AS THEY GET

1251

00:47:45,700 --> 00:47:47,366

A BROAD MIX,
AND ONCE AGAIN, YOU KNOW,

1252

00:47:47,366 --> 00:47:49,033

WHEN WE IMAGINE WHAT THE SCHOOLS
OF THE FUTURE LOOK LIKE,

1253

00:47:49,033 --> 00:47:50,833

WHEN WE SEE
THE BEST IMPLEMENTATIONS,

1254

00:47:50,833 --> 00:47:52,800

THE KIDS ARE OUTSIDE
MORE THAN THEY WERE

1255

00:47:52,800 --> 00:47:55,500

IN KIND OF
A NON-TECHNOLOGY ENABLED WORLD.

1256

00:47:55,500 --> 00:47:56,866

THEY'RE INTERACTING
WITH EACH OTHER MORE

1257

00:47:56,866 --> 00:47:58,833

THAN THEY DID
IN A TRADITIONAL CLASSROOM

1258

00:47:58,833 --> 00:48:00,533

WHERE THEY WERE KIND OF JUST,
YOU KNOW, LISTENING

1259

00:48:00,533 --> 00:48:02,033

AND TAKING NOTES.

1260

00:48:02,033 --> 00:48:05,066

IN TERMS OF YOUNGEST,

1261

00:48:05,066 --> 00:48:07,033

I MEAN, YOU KNOW, I WOULD SAY,
RIGHT NOW,

1262

00:48:07,033 --> 00:48:09,466
KHAN ACADEMY, DEFINITELY
WE'VE SEEN IT RESONATE WELL

1263

00:48:09,466 --> 00:48:11,766
WITH KIND OF MID TO LATE
ELEMENTARY SCHOOL.

1264

00:48:11,766 --> 00:48:13,900
WE HAVE JUST LAUNCHED
SOME EARLY LEARNING CONTENT.

1265

00:48:13,900 --> 00:48:15,966
I WILL SAY THAT, YOU KNOW, IT'S
STILL LEVERAGING THE INTERFACE

1266

00:48:15,966 --> 00:48:18,200
OF THE STUFF THAT'S BEING USED
BY MIDDLE SCHOOL STUDENTS

1267

00:48:18,200 --> 00:48:20,366
AND HIGH SCHOOL STUDENTS,
SO IT'S NOT PERFECT.

1268

00:48:20,366 --> 00:48:21,966
AND WE ARE--
YOU KNOW, WE JUST BROUGHT ON

1269

00:48:21,966 --> 00:48:24,400
SOME INCREDIBLE PEOPLE
TO REALLY THINK ABOUT IT

1270

00:48:24,400 --> 00:48:26,466
IN KIND OF A MOBILE ENVIRONMENT,
'CAUSE OBVIOUSLY,

1271

00:48:26,466 --> 00:48:29,166

ESPECIALLY FOR, YOU KNOW,
FOLKS YOUR DAUGHTER'S AGE,

1272

00:48:29,166 --> 00:48:30,966

YOU KNOW,
BUT EVERY NOW AND THEN,

1273

00:48:30,966 --> 00:48:33,766

I'VE ENCOUNTERED, YOU KNOW,
A PARENT WHO'S--

1274

00:48:33,766 --> 00:48:36,266

YOU KNOW, HAS A FIVE-YEAR-OLD
OR SOMETHING WHO USES IT.

1275

00:48:36,266 --> 00:48:37,766

BUT I MEAN,
THAT MAKES ME INSECURE,

1276

00:48:37,766 --> 00:48:40,333

'CAUSE MY SON WASN'T ON IT,
AND YOU KNOW--

1277

00:48:40,333 --> 00:48:42,266

AND ANYWAY, I'M TRYING NOT
TO PROJECT TOO MUCH.

1278

00:48:42,266 --> 00:48:44,833

WE WERE AT--ACTUALLY,
AT WHOLE FOODS THE OTHER DAY,

1279

00:48:44,833 --> 00:48:46,833

AND SOMEONE RECOGNIZED ME--
ME AND MY SON--

1280

00:48:46,833 --> 00:48:48,566

HE LIKES TAKING RIDES
IN ELEVATORS,

1281

00:48:48,566 --> 00:48:50,700

SO WE WERE, LIKE,
ON OUR FIFTH RIDE.

1282
00:48:50,700 --> 00:48:52,966
AND SOMEONE SAID,
"OH, KHAN ACADEMY."

1283
00:48:52,966 --> 00:48:54,000
HE'S LIKE,
"IS THIS YOUR SON?"

1284
00:48:54,000 --> 00:48:55,500
I WAS LIKE,
"YEAH, THIS IS MY SON."

1285
00:48:55,500 --> 00:48:57,833
- HE WAS LIKE, "OH, YOU MUST BE
SO GOOD AT MATH."

1286
00:48:57,833 --> 00:49:00,233
[laughter]
"WHAT'S FOUR PLUS THREE?"

1287
00:49:00,233 --> 00:49:02,466
AND HE'S LIKE, "SIX."

1288
00:49:02,466 --> 00:49:04,766
I'M GOING,
"NO. OH, NO."

1289
00:49:04,766 --> 00:49:07,366
SO, YEAH.
SO I DON'T KNOW.

1290
00:49:07,366 --> 00:49:10,600
I THINK I'M GONNA HAVE MY OWN
SET OF ISSUES TO DEAL WITH.

1291
00:49:14,266 --> 00:49:16,166
- HI.

- OH. OH, YES.

1292

00:49:16,166 --> 00:49:17,800

- YEAH, ALL THE WAY BACK.

- YES.

1293

00:49:17,800 --> 00:49:20,500

- I WAS WONDERING IF THERE WERE
ANY PLANS FOR KHAN ACADEMY

1294

00:49:20,500 --> 00:49:23,700

TO BE ADDING CURRICULUM
TO LEARN NEW LANGUAGES.

1295

00:49:23,700 --> 00:49:27,533

- HMM. YEAH. NO, I MEAN,
THE SIMPLE ANSWER IS NO.

1296

00:49:27,533 --> 00:49:28,866

I MEAN, IT'S INTERESTING.
WE WERE JUST CHATTING

1297

00:49:28,866 --> 00:49:30,533

WITH SOME
OF THE DUOLINGO FOLKS.

1298

00:49:30,533 --> 00:49:31,866

I DON'T KNOW
IF YOU ALL ARE FAMILIAR.

1299

00:49:31,866 --> 00:49:34,333

I MEAN, THEY'RE A GREAT APP
FOR LEARNING LANGUAGES.

1300

00:49:34,333 --> 00:49:36,166

BUT NO, WE DON'T.
I MEAN, I--

1301

00:49:36,166 --> 00:49:40,700

YOU KNOW, I'VE GOT IDEAS

FOR LANGUAGE LEARNING,

1302

00:49:40,700 --> 00:49:42,800
AND, I MEAN, I'LL TELL YOU
SOME OF MY CRAZY IDEAS.

1303

00:49:42,800 --> 00:49:44,533
YOU KNOW, SETTING UP
SKYPE BUDDIES

1304

00:49:44,533 --> 00:49:46,300
WITH, YOU KNOW,
KIDS OF DIFFERENT AGES--

1305

00:49:46,300 --> 00:49:49,433
I MIGHT TRY TO SET IT UP
FOR MY KIDS IN THE NEAR FUTURE--

1306

00:49:49,433 --> 00:49:51,400
WHERE, YOU KNOW, A KID IN INDIA
OR A KID IN MEXICO,

1307

00:49:51,400 --> 00:49:53,033
WHERE THEY SPEND SOME TIME
IN ENGLISH,

1308

00:49:53,033 --> 00:49:54,500
SOME TIME
IN THE OTHER LANGUAGE

1309

00:49:54,500 --> 00:49:56,366
AND TRY TO SOLVE PROBLEMS
TOGETHER.

1310

00:49:56,366 --> 00:49:57,766
I'VE EVEN THOUGHT THAT,
YOU KNOW,

1311

00:49:57,766 --> 00:49:59,366
THE BEST FOREIGN LANGUAGE

INSTRUCTION--AND IT ACTUALLY--

1312

00:49:59,366 --> 00:50:01,566

IN FACT, IT DEFINITELY
WOULD BE MORE ECONOMICAL--

1313

00:50:01,566 --> 00:50:05,433

WOULD, YOU KNOW, JUST SEND THEM
TO A COUNTRY FOR A MONTH,

1314

00:50:05,433 --> 00:50:07,100

AND THEY WILL COME BACK
HAVING KNOWN THE LANGUAGE.

1315

00:50:07,100 --> 00:50:09,433

SO YES--BUT NO,

1316

00:50:09,433 --> 00:50:12,100

WE AREN'T PROBABLY GONNA DO
FOREIGN LANGUAGE ANYTIME SOON.

1317

00:50:12,100 --> 00:50:14,633

YES.
- HI, SO I SPEND A LOT OF TIME,

1318

00:50:14,633 --> 00:50:18,633

LIKE YOU, WITH MIT ENGINEERS
AND NASA ENGINEERS,

1319

00:50:18,633 --> 00:50:22,133

AND THERE'S A LARGE PERCENTAGE
OF PEOPLE IN THAT POPULATION

1320

00:50:22,133 --> 00:50:24,833

WHO FIT THE FOLLOWING
DESCRIPTION, WHICH IS,

1321

00:50:24,833 --> 00:50:27,766

THEY'RE REALLY GOOD IN MATH,
AND THINGS LIKE WRITING ESSAYS

1322

00:50:27,766 --> 00:50:30,500

AND WRITING STORIES,
THEY'RE, YOU KNOW, NOT SO GREAT.

1323

00:50:30,500 --> 00:50:33,700

SO I ACTUALLY SIGNED UP
ON KHAN ACADEMY A FEW MONTHS AGO

1324

00:50:33,700 --> 00:50:34,833

AND I WAS LOOKING
FOR A WRITING COURSE.

1325

00:50:34,833 --> 00:50:36,100

- MM.
- DIDN'T FIND ONE,

1326

00:50:36,100 --> 00:50:38,166

SO I THOUGHT--WELL,
I HAD A RANGE OF RESPONSES.

1327

00:50:38,166 --> 00:50:40,733

AT ONE END, I'M THINKING,
MAYBE THAT'S TOO CHALLENGING

1328

00:50:40,733 --> 00:50:42,133

OR THERE'S SOMETHING UNIQUE
ABOUT IT

1329

00:50:42,133 --> 00:50:43,800

AND THEY JUST HAVEN'T GOTTEN
TO IT YET.

1330

00:50:43,800 --> 00:50:45,333

AT THE OTHER END
OF THE SPECTRUM, I'M THINKING,

1331

00:50:45,333 --> 00:50:47,200

WELL, MAYBE FOR SOME CAREERS,
YOU KNOW,

1332

00:50:47,200 --> 00:50:48,366

WRITING ISN'T THAT IMPORTANT.

1333

00:50:48,366 --> 00:50:50,533

- OH, NO.

WELL, I MEAN, I--

1334

00:50:50,533 --> 00:50:53,633

I PUT UP--I PUT WRITING UP

THERE, I MEAN, IF, YOU KNOW--

1335

00:50:53,633 --> 00:50:56,933

LIKE, THAT'S THE ENABLER

OF, YOU KNOW, ALMOST EVERYTHING.

1336

00:50:56,933 --> 00:50:59,133

AND, I MEAN, I THINK

THERE'S A TRAGEDY OUT THERE TOO.

1337

00:50:59,133 --> 00:51:01,266

I MEAN, I AGREE, A LOT OF PEOPLE

WHO ARE STRONG IN MATH

1338

00:51:01,266 --> 00:51:03,833

AND SCIENCE KIND OF THINK

WRITING ISN'T FOR THEM,

1339

00:51:03,833 --> 00:51:05,066

AND THEN YOU HAVE PEOPLE

ON THE OTHER SIDE

1340

00:51:05,066 --> 00:51:07,533

WHO ARE STRONG WRITERS,

WHO THINK MATH AND SCIENCE

1341

00:51:07,533 --> 00:51:09,266

ISN'T FOR THEM,

AND IT'S A TRAGEDY,

1342

00:51:09,266 --> 00:51:10,966

BECAUSE IF ANYTHING,
I'VE SEEN--

1343

00:51:10,966 --> 00:51:12,466

IT'S THE SAME EXACT MUSCLES
YOU USE.

1344

00:51:12,466 --> 00:51:14,166

IT'S THE ABILITY
TO THINK CLEARLY,

1345

00:51:14,166 --> 00:51:18,100

TO STRUCTURE YOUR THOUGHT,
TO BE LOGICAL.

1346

00:51:18,100 --> 00:51:21,400

SO, I MEAN, I ACTUALLY THINK
IF PEOPLE ALLOW THEMSELVES

1347

00:51:21,400 --> 00:51:23,700

TO THINK THIS WAY,
THE PEOPLE--

1348

00:51:23,700 --> 00:51:25,533

THE VERY SAME PEOPLE
WHO ARE EXCELLENT WRITERS

1349

00:51:25,533 --> 00:51:27,600

CAN BE AMAZING MATHEMATICIANS
AND VICE VERSA.

1350

00:51:27,600 --> 00:51:30,033

AND, YOU KNOW, I SEE KIND OF A--
THERE'S A COROLLARY THERE

1351

00:51:30,033 --> 00:51:31,166

WHERE I SEE PEOPLE
WHO IT'S LIKE,

1352

00:51:31,166 --> 00:51:32,333

"OH, I'M NOT
INTO MATH AND SCIENCE.

1353

00:51:32,333 --> 00:51:34,266

I CONSIDER MYSELF
A CREATIVE PERSON."

1354

00:51:34,266 --> 00:51:36,366

AND THAT KILLS ME TOO,
BECAUSE AS WE ALL KNOW,

1355

00:51:36,366 --> 00:51:38,433

MATH AND SCIENCE IS, YOU KNOW,
ESPECIALLY IN ENGINEERING,

1356

00:51:38,433 --> 00:51:41,600

IT'S ALL ABOUT CREATING THINGS
THAT NEVER EXISTED BEFORE.

1357

00:51:41,600 --> 00:51:43,866

AND I THINK
SOME OF THIS DICHOTOMY HAPPENS

1358

00:51:43,866 --> 00:51:47,066

BECAUSE, YOU KNOW,
EARLY ON IN OUR EDUCATION,

1359

00:51:47,066 --> 00:51:52,600

WE EVALUATE STUDENTS, YOU KNOW,
WITH THESE TESTS, YOU KNOW.

1360

00:51:52,600 --> 00:51:55,700

AT THIRD GRADE, HOW WELL CAN YOU
MULTIPLY THESE TWO NUMBERS?

1361

00:51:55,700 --> 00:51:57,833

HAVE YOU MEMORIZED
YOUR MULTIPLICATION TABLES WELL?

1362

00:51:57,833 --> 00:51:59,266

AND WE EVALUATE,
AND WE GIVE THEM--

1363

00:51:59,266 --> 00:52:00,933

YOU KNOW,
WE GIVE THEM A GRADE.

1364

00:52:00,933 --> 00:52:02,966

AND THAT GRADE ISN'T LIKE,
OH, YOU KNEW 80%.

1365

00:52:02,966 --> 00:52:04,966

LET'S KEEP WORKING ON IT,
SO YOU GET 100%.

1366

00:52:04,966 --> 00:52:07,800

THAT GRADE IS, YOU KNEW 80%.
YOU ARE A "C" STUDENT.

1367

00:52:07,800 --> 00:52:09,033

YOU ARE MEDIOCRE.

1368

00:52:09,033 --> 00:52:11,200

JUST REMEMBER THAT,
YOU'RE MEDIOCRE.

1369

00:52:11,200 --> 00:52:13,766

AND WHAT THAT DOES IS--

1370

00:52:13,766 --> 00:52:19,000

OH, I MEAN, WELL, I JUST LOST MY
TRAIN OF THOUGHT WITH ALL THE--

1371

00:52:19,000 --> 00:52:21,566

WHAT WERE WE TALKING ABOUT?
- WRITING.

1372

00:52:21,566 --> 00:52:22,933

- OH, WRITING.
YEAH, WE WERE TALKING--

1373
00:52:22,933 --> 00:52:24,366
[muttering]
[laughter]

1374
00:52:24,366 --> 00:52:26,933
IT WAS REALLY GOOD TOO,
WHAT I WAS ABOUT TO SAY.

1375
00:52:26,933 --> 00:52:28,800
ANYWAY, I'M GONNA REMEMBER IT
IN, LIKE, 30 SECONDS.

1376
00:52:28,800 --> 00:52:32,266
BUT I JUST HAD A COMPLETE--YES.
BUT ANYWAY, THE--

1377
00:52:32,266 --> 00:52:33,933
OH, NOW I REMEMBER.
WE--

1378
00:52:33,933 --> 00:52:35,500
[laughter]

1379
00:52:35,500 --> 00:52:37,900
THAT--WHAT THAT IS,
IS THAT'S LIKE--

1380
00:52:37,900 --> 00:52:41,533
THAT'S LIKE
EVALUATING ARTISTS

1381
00:52:41,533 --> 00:52:43,433
BASED ON HOW WELL
THEY MIX PAINT.

1382
00:52:43,433 --> 00:52:44,733
OR IT'S LIKE EVALUATING A DANCER

1383

00:52:44,733 --> 00:52:47,800

BASED ON HOW FLEXIBLE THEY ARE
AT AGE EIGHT.

1384

00:52:47,800 --> 00:52:49,800

AND SO I THINK
THERE COULD BE A LOT

1385

00:52:49,800 --> 00:52:51,266

THAT COULD BE DONE
ON THE WRITING SIDE.

1386

00:52:51,266 --> 00:52:53,333

I THINK A LOT OF PEOPLE
HAVE A FEAR OF WRITING.

1387

00:52:53,333 --> 00:52:55,666

THEY HAD A TEACHER AT SOME POINT
THAT WAS VERY,

1388

00:52:55,666 --> 00:52:57,166

"HEY, YOU MISSPELLED
THAT WORD."

1389

00:52:57,166 --> 00:52:58,800

AND THEY LOST
THE CREATIVE SIDE.

1390

00:52:58,800 --> 00:53:00,766

HEY, JUST WRITE,
WRITE WHAT YOU'RE THINKING.

1391

00:53:00,766 --> 00:53:03,633

WRITE FREELY, WRITE WHAT
YOU'RE--YOUR ARGUMENT.

1392

00:53:03,633 --> 00:53:05,266

AND LIKEWISE, A LOT OF PEOPLE
GET TURNED OFF

1393

00:53:05,266 --> 00:53:06,633
OF MATH AND SCIENCE.

1394

00:53:06,633 --> 00:53:08,800
THEY GOT DINGED, HEY,
YOU'RE NOT GOOD AT THIS OR THAT.

1395

00:53:08,800 --> 00:53:11,333
EVEN THOUGH THEY WOULD LOVE TO
BUILD THINGS AND CREATE THINGS.

1396

00:53:11,333 --> 00:53:13,666
IN TERMS OF KIND OF THE WRITING,
I MEAN,

1397

00:53:13,666 --> 00:53:15,366
IT IS SOMETHING THAT ONE DAY
WE WILL WANT TO DO

1398

00:53:15,366 --> 00:53:16,400
ON KHAN ACADEMY.

1399

00:53:16,400 --> 00:53:17,733
I THINK
IT'S ACTUALLY GOING TO BE

1400

00:53:17,733 --> 00:53:19,800
SOMETHING CLOSER TO
OUR COMPUTER SCIENCE PLATFORM,

1401

00:53:19,800 --> 00:53:22,733
WHERE YOU HAVE THESE PROJECTS,
YOU CAN CREATE THEM.

1402

00:53:22,733 --> 00:53:24,833
YOU CAN PUBLISH THEM,
THEY'RE IN YOUR PROFILE,

1403

00:53:24,833 --> 00:53:26,266
AND THEY'RE ESSENTIALLY
YOUR PORTFOLIO.

1404
00:53:26,266 --> 00:53:27,500
AND THEN THE REST
OF THE COMMUNITY

1405
00:53:27,500 --> 00:53:29,166
CAN GIVE YOU FEEDBACK
ON HOW YOU DID,

1406
00:53:29,166 --> 00:53:32,100
AND SO YOU CAN KEEP ITERATING
AND MAKING THEM BETTER.

1407
00:53:32,100 --> 00:53:35,466
- OKAY, THANKS.
- YEAH.

1408
00:53:35,466 --> 00:53:38,200
- I MENTOR MOUNTAIN VIEW
HIGH SCHOOL ROBOTICS TEAM.

1409
00:53:38,200 --> 00:53:40,333
AND ONE
OF THE BIGGEST CHALLENGES I HAVE

1410
00:53:40,333 --> 00:53:42,833
AS A MENTOR FOR THESE KIDS,
THESE HIGH SCHOOL KIDS--

1411
00:53:42,833 --> 00:53:45,533
I'M AN ENGINEER HERE AT NASA--

1412
00:53:45,533 --> 00:53:48,833
IS GETTING THEM TO COMMIT
TO DOING IT, TO,

1413
00:53:48,833 --> 00:53:52,066

YOU KNOW, GO READ STUFF OUTSIDE
OF SOMEONE HANDING IT TO 'EM

1414
00:53:52,066 --> 00:53:53,800
AND ALL THAT,

1415
00:53:53,800 --> 00:53:55,933
AND YOU SHOWING
THE YOUNG FELLOW HERE'S VIDEO,

1416
00:53:55,933 --> 00:53:58,300
I WAS THINKING,
HE WAS ONE OF THOSE KIDS--

1417
00:53:58,300 --> 00:54:00,766
MAYBE WORSE SO
THAN THE ONES I'M WITH--

1418
00:54:00,766 --> 00:54:03,700
AND THEN HE ENGAGED,
AND HE COMMITTED TO LEARN,

1419
00:54:03,700 --> 00:54:06,200
AND HE FOLLOWED THROUGH, AND
HE'S DONE EXCEPTIONALLY WELL.

1420
00:54:06,200 --> 00:54:08,433
THE ONES THAT I MENTOR
THAT DO THAT,

1421
00:54:08,433 --> 00:54:11,400
COMMIT AND GO ON,
DO REALLY WELL.

1422
00:54:11,400 --> 00:54:13,766
THE BIGGEST CHALLENGE I HAVE
IS TO GETTING THEM TO COMMIT.

1423
00:54:13,766 --> 00:54:16,433
- YEAH.

- WHAT DO YOU HAVE ON THAT?

1424

00:54:16,433 --> 00:54:19,633

- YEAH, I MEAN, YOU KNOW,
THERE'S NO SIMPLE ANSWER THERE.

1425

00:54:19,633 --> 00:54:21,800

I MEAN, I--THERE'S--

1426

00:54:21,800 --> 00:54:23,466

YOU KNOW, I WILL CITE,
THERE'S ALL THIS--

1427

00:54:23,466 --> 00:54:25,066

YOU KNOW, THIS IS SOMETHING
WE TALK A LOT ABOUT

1428

00:54:25,066 --> 00:54:27,366

IN OUR OWN--
AT KHAN ACADEMY.

1429

00:54:27,366 --> 00:54:29,066

THERE'S ALL THIS RESEARCH
AROUND MIND-SETS,

1430

00:54:29,066 --> 00:54:30,766

AROUND, YOU KNOW,
THE GROWTH MIND-SET--

1431

00:54:30,766 --> 00:54:31,833

HOW MANY OF YOU ARE FAMILIAR

1432

00:54:31,833 --> 00:54:33,400

WITH THIS IDEA
OF A GROWTH MIND-SET?

1433

00:54:33,400 --> 00:54:35,533

ANY--OKAY, A FEW FOLKS.
THERE'S A RESEARCHER,

1434

00:54:35,533 --> 00:54:37,633

CAROL DWECK AT STANFORD,
HER WHOLE RESEARCH

1435

00:54:37,633 --> 00:54:39,133

FOR THE LAST SEVERAL DECADES
IS GROWTH MIND-SET.

1436

00:54:39,133 --> 00:54:42,166

AND IT'S THIS IDEA THAT YOU CAN
EITHER HAVE A GROWTH MIND-SET

1437

00:54:42,166 --> 00:54:43,800

OR A FIXED MIND-SET.

1438

00:54:43,800 --> 00:54:45,466

AND UNFORTUNATELY, MOST OF
THE WORLD HAS A FIXED MIND-SET.

1439

00:54:45,466 --> 00:54:47,566

THEY JUST THINK THAT THEY'RE
EITHER GOOD OR BAD AT SOMETHING.

1440

00:54:47,566 --> 00:54:49,900

I'M A GOOD WRITER.
I'M BAD AT MATH.

1441

00:54:49,900 --> 00:54:51,533

OR I'M--YOU KNOW,
SO THEY THINK INNATE,

1442

00:54:51,533 --> 00:54:52,866

IT WAS KIND OF GOD-GIVEN.

1443

00:54:52,866 --> 00:54:54,900

WHILE A GROWTH MIND-SET PERSON
SAYS, "WELL, IF I KEEP

1444

00:54:54,900 --> 00:54:57,400

WORKING ON SOMETHING ENOUGH
AND IF I REALLY OWN IT,

1445

00:54:57,400 --> 00:54:59,700

I CAN EVENTUALLY GET
TO WHATEVER I NEED TO GET TO."

1446

00:54:59,700 --> 00:55:01,633

AND HER RESEARCH HAS SHOWN
THAT, LIKE,

1447

00:55:01,633 --> 00:55:04,466

IF YOU DO GROWTH MIND-SET
INTERVENTIONS--

1448

00:55:04,466 --> 00:55:05,966

THERE'S ANOTHER RESEARCHER,
ANGELA DUCKWORTH

1449

00:55:05,966 --> 00:55:08,600

AT UNIVERSITY OF PENNSYLVANIA,
ON GRIT AND PERSEVERANCE--

1450

00:55:08,600 --> 00:55:10,433

AND THEY DO THESE, YOU KNOW,
YOU WOULD THINK,

1451

00:55:10,433 --> 00:55:12,133

ALMOST SUPERFICIAL
INTERVENTIONS,

1452

00:55:12,133 --> 00:55:15,133

WHERE THEY WILL JUST TELL
THE STUDENT THAT, YOU KNOW,

1453

00:55:15,133 --> 00:55:17,533

WHEN YOU MAKE A MISTAKE,
THAT'S WHEN YOUR BRAIN GROWS.

1454

00:55:17,533 --> 00:55:19,466

OR THEY WOULD DO
A LITTLE INTERVENTION ABOUT--

1455
00:55:19,466 --> 00:55:21,100
AND IT HAS ALL SORTS
OF IMPLICATIONS

1456
00:55:21,100 --> 00:55:22,800
FOR THE REST OF THEIR--

1457
00:55:22,800 --> 00:55:24,800
SO IT'S--
I THINK IT'S PART OF OWNING--

1458
00:55:24,800 --> 00:55:26,800
PART OF THE REASON
WHY PEOPLE DON'T OWN THINGS

1459
00:55:26,800 --> 00:55:30,133
IS BECAUSE THEY'RE AFRAID
OF STRUGGLING AND FAILING,

1460
00:55:30,133 --> 00:55:31,566
AND THEN THEY KIND OF
JUDGE THEMSELVES.

1461
00:55:31,566 --> 00:55:33,666
SO I THINK
THAT'S PROBABLY ONE ASPECT.

1462
00:55:33,666 --> 00:55:35,000
I THINK THE OTHER ASPECT
OF IT,

1463
00:55:35,000 --> 00:55:36,600
THAT'S HAPPENING FOR A LOT
OF HIGH SCHOOL STUDENTS,

1464
00:55:36,600 --> 00:55:40,533
IS THAT WE KIND OF

OVERSCHEDULE THEIR TIME,

1465

00:55:40,533 --> 00:55:42,300

SO THEY HAVE--

THERE'S NO BREATHING ROOM.

1466

00:55:42,300 --> 00:55:43,533

AND THAT TIME IS LITERALLY,

YOU KNOW, LIKE,

1467

00:55:43,533 --> 00:55:44,633

THEY HAVE SIX DIFFERENT TEACHERS

SAYING,

1468

00:55:44,633 --> 00:55:45,633

DO THIS TONIGHT.

DO THAT TONIGHT.