1

00:00:04,880 --> 00:00:11,910

module 11 effective interventions for

2

00:00:08,309 --> 00:00:13,680

reading difficulties session for highly

3

00:00:11,910 --> 00:00:17,550

effective intervention for reading

4

00:00:13,680 --> 00:00:18,900

difficulties hello this is David

5

00:00:17,550 --> 00:00:21,060

Kilpatrick your presenter for these

6

00:00:18,900 --> 00:00:23,550

online webinars and as a result of these

7

00:00:21,060 --> 00:00:24,720

webinars participants should learn a lot

8

00:00:23,550 --> 00:00:26,700

more about the reading research

9

00:00:24,720 --> 00:00:28,140

particularly as it pertains to assessing

10

00:00:26,700 --> 00:00:31,320

preventing and overcoming reading

11

00:00:28,140 --> 00:00:33,660

difficulties we are now in module 11 you

12

00:00:31,320 --> 00:00:36,719

can see the 13 modules in this set of

13

00:00:33,660 --> 00:00:40,530

webinars we're in the fourth session of

14

00:00:36,719 --> 00:00:42,420

this 11th module as a result of this

15

00:00:40,530 --> 00:00:43,800

particular session participants should

16

00:00:42,420 --> 00:00:45,149

be able to describe the three key

17

00:00:43,800 --> 00:00:46,649

elements found in the most highly

18

00:00:45,149 --> 00:00:48,899

successful word level reading

19

00:00:46,649 --> 00:00:50,550

intervention studies and explain why

20

00:00:48,899 --> 00:00:56,579

these key elements promote maximum

21

00:00:50,550 --> 00:00:58,079

success in the research literature as we

22

00:00:56,579 --> 00:00:59,760

reviewed in the last session there

23

00:00:58,079 --> 00:01:01,530

appears to be three different levels of

24

00:00:59,760 --> 00:01:03,870

outcome based upon standard score point

25

00:01:01,530 --> 00:01:05,840

gains using normed word identification

26

00:01:03,870 --> 00:01:09,869

tests

27

00:01:05,840 --> 00:01:13,109

zero to six six to nine twelve to twenty

28

00:01:09,869 --> 00:01:14,819

five in the previous session the degree

29

00:01:13,109 --> 00:01:16,499

of phonemic training was suggested to be

30

00:01:14,819 --> 00:01:20,159

responsible for those differences in

31

00:01:16,499 --> 00:01:22,590

outcomes many different research reviews

32

00:01:20,159 --> 00:01:25,740

have shown contrary to our intuitions

33

00:01:22,590 --> 00:01:27,329

that the following five factors display

34

00:01:25,740 --> 00:01:28,799

little or no consistent impact on

35

00:01:27,329 --> 00:01:32,459

intervention outcomes for word reading

36

00:01:28,799 --> 00:01:34,049

intervention socioeconomic status does

37

00:01:32,459 --> 00:01:36,359

have an impact but it's much more

38

00:01:34,049 --> 00:01:38,639

limited than we would guess now remember

39

00:01:36,359 --> 00:01:40,200

I'm talking about intervention outcomes

40

00:01:38,639 --> 00:01:41,999

I'm not talking about reading in general

41

00:01:40,200 --> 00:01:44,729

I'm talking about intervention outcomes

42

00:01:41,999 --> 00:01:47,099

here and the age of students there seems

43

00:01:44,729 --> 00:01:49,560

to be a small but consistent impact on

44

00:01:47,099 --> 00:01:51,149

say working with second graders versus

45

00:01:49,560 --> 00:01:53,819

say working with sixth graders or ninth

46

00:01:51,149 --> 00:01:56,009

graders interestingly though the length

47

00:01:53,819 --> 00:01:59,209

of the intervention the severity of the

48

00:01:56,009 --> 00:02:02,999

problem and group size do not show

49

00:01:59,209 --> 00:02:04,679

consistent impact this is all pretty

50

00:02:02,999 --> 00:02:06,299

good news actually because we can't

51

00:02:04,679 --> 00:02:08,640

change socio-economic status

52

00:02:06,299 --> 00:02:09,840

we can't change the age of the students

53

00:02:08,640 --> 00:02:12,150

at the beginning we get them when they

54

00:02:09,840 --> 00:02:14,310

get them and one on one instruction is

55

00:02:12,150 --> 00:02:17,490

very expensive and lengthy interventions

56

00:02:14,310 --> 00:02:18,069

are expensive so what appears to account

57

00:02:17,490 --> 00:02:20,650

for the differance

58

00:02:18,069 --> 00:02:22,420

in outcomes that was described a couple

59

00:02:20,650 --> 00:02:24,420

screens ago the zero to six six to

60

00:02:22,420 --> 00:02:27,370

nine and twelve and twenty five

61

00:02:24,420 --> 00:02:29,829

instruction that is something we can

62

00:02:27,370 --> 00:02:32,230

control so it's pretty exciting that the

63

00:02:29,829 --> 00:02:34,980

key factor that distinguishes outcomes

64

00:02:32,230 --> 00:02:37,629

is something that we have control over

65

00:02:34,980 --> 00:02:40,090

going back over those three different

66

00:02:37,629 --> 00:02:42,939

levels of outcomes in the minimal

67

00:02:40,090 --> 00:02:44,290

outcome interventions usually about two

68

00:02:42,939 --> 00:02:47,799

to four standard score points but

69

00:02:44,290 --> 00:02:50,950

sometimes zero and in one case six that

70

00:02:47,799 --> 00:02:53,019

I saw in one case five even those gains

71

00:02:50,950 --> 00:02:55,450

they get are often lost at follow-up

72

00:02:53,019 --> 00:02:57,730

now only a certain portion of studies do

73

00:02:55,450 --> 00:03:00,760

follow up a six months a year two years

74

00:02:57,730 --> 00:03:03,489

later and when follow-ups do occur very

75

00:03:00,760 --> 00:03:05,530

often these results are lost and these

76

00:03:03,489 --> 00:03:07,209

studies fall into two groups roughly

77

00:03:05,530 --> 00:03:11,560

speaking those that did phonics

78

00:03:07,209 --> 00:03:13,480

instruction and those that did not none

79

00:03:11,560 --> 00:03:15,129

of the studies in this group did any

80

00:03:13,480 --> 00:03:17,829

kind of formalized phonemic awareness

81

00:03:15,129 --> 00:03:22,479

training all of them did reading

82

00:03:17,829 --> 00:03:24,659

practice in some form or another no non

83

00:03:22,479 --> 00:03:27,549

phonic approach made it beyond this

84

00:03:24,659 --> 00:03:30,970

particular outcome level so in other

85

00:03:27,549 --> 00:03:33,250

words we have no non phonic approach to

86

00:03:30,970 --> 00:03:34,959

word level reading problems that allows

87

00:03:33,250 --> 00:03:39,129

children to catch up we just don't have

88

00:03:34,959 --> 00:03:40,629

that in the research literature then you

89

00:03:39,129 --> 00:03:42,519

have the more moderate outcome

90

00:03:40,629 --> 00:03:44,139

interventions and they had usually about

91

00:03:42,519 --> 00:03:47,919

six to seven standard score point gains

92

00:03:44,139 --> 00:03:49,629

and their follow-up scores tend to be a

93

00:03:47,919 --> 00:03:51,069

little bit weaker maybe bump down about

94

00:03:49,629 --> 00:03:52,389

you know three to five standard score

95

00:03:51,069 --> 00:03:55,299

point gains when there was follow-up

96

00:03:52,389 --> 00:03:58,180

studies and these studies all use

97

00:03:55,299 --> 00:04:00,819

systematic phonics systematic intensive

98

00:03:58,180 --> 00:04:04,319

phonics instruction and they all did

99

00:04:00,819 --> 00:04:06,579

some form of reading practice as well

100

00:04:04,319 --> 00:04:09,310

but what's different compared to the

101

00:04:06,579 --> 00:04:11,290

other studies that did phonics

102

00:04:09,310 --> 00:04:12,759

is that they also did phonemic awareness

103

00:04:11,290 --> 00:04:14,409

training but they only did phonemic

104

00:04:12,759 --> 00:04:16,389

awareness training up to the equivalent

105

00:04:14,409 --> 00:04:18,280

of about an ending first grade level for

106

00:04:16,389 --> 00:04:19,989

typically developing readers and that

107

00:04:18,280 --> 00:04:23,199

would be teaching kids to segment and

108

00:04:19,989 --> 00:04:25,960

blend at the phoneme level with the most

109

00:04:23,199 --> 00:04:28,000

highly successful outcomes that tended

110

00:04:25,960 --> 00:04:30,639

to be about 14 to 17 standard score

111

00:04:28,000 --> 00:04:31,190

point gains but went as high as 25 there

112

00:04:30,639 --> 00:04:33,380

was more

113

00:04:31,190 --> 00:04:34,760

than one outcome that was above 20

114

00:04:33,380 --> 00:04:37,550

standard score playing gains in real

115

00:04:34,760 --> 00:04:41,120

word reading those gains were maintained

116

00:04:37,550 --> 00:04:42,980

at follow-up and in one case or actually

117

00:04:41,120 --> 00:04:44,720

more than one case but a case I want to

118

00:04:42,980 --> 00:04:47,720

point out here is the study that

119

00:04:44,720 --> 00:04:49,430

prompted tier 3 they continued to show

120

00:04:47,720 --> 00:04:51,980

gains so they at the end of the study

121

00:04:49,430 --> 00:04:53,300

had 14 standard score point gains two

122

00:04:51,980 --> 00:04:55,360

years later they checked back and they

123

00:04:53,300 --> 00:04:58,850

had made 18 standard score point gains

124

00:04:55,360 --> 00:05:01,760

my interpretation of integrating what we

125

00:04:58,850 --> 00:05:04,640

know about orthographic learning with

126

00:05:01,760 --> 00:05:06,110

this would suggest that now those

127

00:05:04,640 --> 00:05:07,880

children as a result of that

128

00:05:06,110 --> 00:05:09,950

intervention could remember the words

129

00:05:07,880 --> 00:05:12,410

they read so they continued to grow over

130

00:05:09,950 --> 00:05:14,270

that two-year period as they added more

131

00:05:12,410 --> 00:05:15,140

words to their site vocabulary do I know

132

00:05:14,270 --> 00:05:17,270

that for a fact

133

00:05:15,140 --> 00:05:18,650

no I'm making an inference between those

134

00:05:17,270 --> 00:05:20,810

two different literature's that I talked

135

00:05:18,650 --> 00:05:22,460

about in the last session the literature

136

00:05:20,810 --> 00:05:24,860

on orthographic learning and the

137

00:05:22,460 --> 00:05:27,410

literature on word level reading

138

00:05:24,860 --> 00:05:30,290

intervention all of these studies use

139

00:05:27,410 --> 00:05:31,340

systematic phonics instruction and all

140

00:05:30,290 --> 00:05:33,890

of them did some sort of reading

141

00:05:31,340 --> 00:05:35,360

practice and the reading practice could

142

00:05:33,890 --> 00:05:37,790

have taken up about 5% of the

143

00:05:35,360 --> 00:05:39,200

instructional time as much as 50% of the

144

00:05:37,790 --> 00:05:41,330

instructional time and varied across

145

00:05:39,200 --> 00:05:43,430

studies but interestingly that didn't

146

00:05:41,330 --> 00:05:47,180

seem to have much of a big impact on the

147

00:05:43,430 --> 00:05:49,070

outcome all of them trained phonemic

148

00:05:47,180 --> 00:05:51,919

awareness using phonemic manipulation

149

00:05:49,070 --> 00:05:54,050

activities they were 6 I don't know if I

150

00:05:51,919 --> 00:05:55,730

want to best call them programs but

151

00:05:54,050 --> 00:05:57,140

there were six different programs across

152

00:05:55,730 --> 00:05:58,970

the research study so this isn't

153

00:05:57,140 --> 00:06:01,610

specific to one program that does

154

00:05:58,970 --> 00:06:03,110

phonemic manipulation basically all the

155

00:06:01,610 --> 00:06:04,730

programs that were studied that did

156

00:06:03,110 --> 00:06:07,160

phonemic manipulation seemed to have

157

00:06:04,730 --> 00:06:09,320

pretty good results some it was just one

158

00:06:07,160 --> 00:06:12,860

particular study on a given program and

159

00:06:09,320 --> 00:06:17,000

some one particular program had numerous

160

00:06:12,860 --> 00:06:18,790

studies to support its efficacy three of

161

00:06:17,000 --> 00:06:21,560

those are commercially available and

162

00:06:18,790 --> 00:06:23,330

three were experimenter designs all six

163

00:06:21,560 --> 00:06:26,419

of those approaches had equivalent

164

00:06:23,330 --> 00:06:28,460

results so regardless of which program

165

00:06:26,419 --> 00:06:31,460

did phonic training and phonemic

166

00:06:28,460 --> 00:06:33,890

manipulation training they all had very

167

00:06:31,460 --> 00:06:35,120

similar results we couldn't say one was

168

00:06:33,890 --> 00:06:37,400

better than the other but you could say

169

00:06:35,120 --> 00:06:39,890

all of them were better than the other

170

00:06:37,400 --> 00:06:43,060

interventions that were in the groups

171

00:06:39,890 --> 00:06:43,060

that had lesser results

172

00:06:43,870 --> 00:06:48,350

none of these studies was directly based

173

00:06:46,340 --> 00:06:50,600

on the orthographic learning literature

174

00:06:48,350 --> 00:06:51,980

as I mentioned in the last session none

175

00:06:50,600 --> 00:06:54,020

of them attempted to directly address

176

00:06:51,980 --> 00:06:56,360

phonemic proficiency so why do I think

177

00:06:54,020 --> 00:07:00,470

that phonemic proficiency explains this

178

00:06:56,360 --> 00:07:02,120

I think we can infer it because I have

179

00:07:00,470 --> 00:07:03,920

personally had direct experience with

180

00:07:02,120 --> 00:07:07,310

phonemic manipulation training for the

181

00:07:03,920 --> 00:07:09,430

last 20 years my mentor had direct

182

00:07:07,310 --> 00:07:11,990

experience with that type of training

183

00:07:09,430 --> 00:07:13,700

for the 20 years preceding that going

184

00:07:11,990 --> 00:07:17,810

all the way back to the original Rosner

185

00:07:13,700 --> 00:07:20,390

program from the 1970s and what we found

186

00:07:17,810 --> 00:07:22,310

over and over and over again is when you

187

00:07:20,390 --> 00:07:25,550

do phonemic manipulation activities with

188

00:07:22,310 --> 00:07:26,330

children they may take 4 5 6 seconds to

189

00:07:25,550 --> 00:07:29,150

respond

190

00:07:26,330 --> 00:07:31,760

but eventually they respond very quickly

191

00:07:29,150 --> 00:07:33,740

so even some of your most severe

192

00:07:31,760 --> 00:07:36,020

phonological core deficit kids with

193

00:07:33,740 --> 00:07:38,870

direct training will respond instantly

194

00:07:36,020 --> 00:07:40,490

to those phonemic manipulations and so

195

00:07:38,870 --> 00:07:41,450

therefore that suggests to me that

196

00:07:40,490 --> 00:07:44,900

they've developed the phonemic

197

00:07:41,450 --> 00:07:48,440

proficiency phonemic proficiency was

198

00:07:44,900 --> 00:07:49,730

never mentioned in any of those studies

199

00:07:48,440 --> 00:07:52,310

that I described that had those great

200

00:07:49,730 --> 00:07:54,500

outcomes and in none of those studies

201

00:07:52,310 --> 00:07:56,900

were any of the programs designed for

202

00:07:54,500 --> 00:07:58,850

kids to respond quickly but I'm

203

00:07:56,900 --> 00:08:01,070

inferring that they did even though it

204

00:07:58,850 --> 00:08:03,530

wasn't mentioned based upon the

205

00:08:01,070 --> 00:08:05,300

experience with countless students that

206

00:08:03,530 --> 00:08:06,910

have been trained in phonemic

207

00:08:05,300 --> 00:08:09,410

manipulation activities

208

00:08:06,910 --> 00:08:11,300

unless the children they were working

209

00:08:09,410 --> 00:08:12,860

with were qualitatively different than

210

00:08:11,300 --> 00:08:14,390

the children we've been working with I

211

00:08:12,860 --> 00:08:17,660

think it's a fair assumption to make

212

00:08:14,390 --> 00:08:20,060

but we need research to strengthen this

213

00:08:17,660 --> 00:08:22,070

inference that I'm making I am making an

214

00:08:20,060 --> 00:08:23,990

inference that's not the same as science

215

00:08:22,070 --> 00:08:25,250

we need some studies that directly

216

00:08:23,990 --> 00:08:28,460

address this issue of phonemic

217

00:08:25,250 --> 00:08:30,290

proficiency in reading but in the

218

00:08:28,460 --> 00:08:32,420

meantime I think we can do monkey-see

219

00:08:30,290 --> 00:08:34,970

monkey-do we can look at the studies

220

00:08:32,420 --> 00:08:37,580

that got the best results and mimic the

221

00:08:34,970 --> 00:08:39,230

type of intervention that they used it

222

00:08:37,580 --> 00:08:41,360

appears that the continuum of outcomes

223

00:08:39,230 --> 00:08:43,160

is consistent with word learning

224

00:08:41,360 --> 00:08:45,080

theories and that's very exciting

225

00:08:43,160 --> 00:08:47,180

because they are completely independent

226

00:08:45,080 --> 00:08:50,150

scientific enterprises and they fit

227

00:08:47,180 --> 00:08:51,590

together like hand and glove so the

228

00:08:50,150 --> 00:08:53,510

basic formula for word reading

229

00:08:51,590 --> 00:08:55,110

intervention based upon the studies with

230

00:08:53,510 --> 00:08:56,610

the best results

231

00:08:55,110 --> 00:08:58,200

number one train the phonemic awareness

232

00:08:56,610 --> 00:09:01,170

skills to the point of automaticity

233

00:08:58,200 --> 00:09:02,790

using phoneme manipulation activities that

234

00:09:01,170 --> 00:09:05,670

was consistent across this group of

235

00:09:02,790 --> 00:09:08,130

studies teach letter-sound relationships

236

00:09:05,670 --> 00:09:10,829

and basic phonic patterns explicitly and

237

00:09:08,130 --> 00:09:13,220

systematically all the studies that have

238

00:09:10,829 --> 00:09:15,600

the best results did that as well and

239

00:09:13,220 --> 00:09:18,600

provide opportunities for reading real

240

00:09:15,600 --> 00:09:20,459

text that is paragraph reading it's the

241

00:09:18,600 --> 00:09:22,290

only way for students to get exposed to

242

00:09:20,459 --> 00:09:24,060

new words so they can add those words to

243

00:09:22,290 --> 00:09:25,709

their sight vocabulary in other words

244

00:09:24,060 --> 00:09:27,570

now that you've trained the underlying

245

00:09:25,709 --> 00:09:29,100

skills the letter-sound proficiency the

246

00:09:27,570 --> 00:09:31,110

phonemic proficiency so kids can

247

00:09:29,100 --> 00:09:32,910

remember words now they need to be

248

00:09:31,110 --> 00:09:35,279

exposed to words that they can remember

249

00:09:32,910 --> 00:09:36,899

and the only way to get exposed to that

250

00:09:35,279 --> 00:09:38,060

larger pool of words is through doing a

251

00:09:36,899 --> 00:09:40,260

lot of reading

252

00:09:38,060 --> 00:09:42,300

we certainly need further research to

253

00:09:40,260 --> 00:09:44,760

tie together the word learning findings

254

00:09:42,300 --> 00:09:46,170

and the word intervention findings I am

255

00:09:44,760 --> 00:09:48,149

connecting two different literature's

256

00:09:46,170 --> 00:09:50,190

that have not previously been connected

257

00:09:48,149 --> 00:09:52,620

but as I said at minimum we can do

258

00:09:50,190 --> 00:09:54,990

monkey-see monkey-do and mimic the kind

259

00:09:52,620 --> 00:09:57,680

of activities that were found in the

260

00:09:54,990 --> 00:09:59,760

most highly effective approaches

261

00:09:57,680 --> 00:10:01,860

tentatively we can infer that these

262

00:09:59,760 --> 00:10:04,500

effective interventions provided the

263

00:10:01,860 --> 00:10:06,269

cognitive linguistic tools that those

264

00:10:04,500 --> 00:10:07,800

weak readers needed so they can now

265

00:10:06,269 --> 00:10:09,329

remember the words they read those were

266

00:10:07,800 --> 00:10:11,250

the phonemic proficiency the

267

00:10:09,329 --> 00:10:13,170

letter-sound proficiency and of course

268

00:10:11,250 --> 00:10:14,430

the exposure to new words now that

269

00:10:13,170 --> 00:10:16,680

they're good at remembering words I

270

00:10:14,430 --> 00:10:19,170

would suggest that this formula this

271

00:10:16,680 --> 00:10:21,810

three-part formula represents best

272

00:10:19,170 --> 00:10:23,490

practice and intervention none of the

273

00:10:21,810 --> 00:10:25,709

other approaches that have been used

274

00:10:23,490 --> 00:10:27,570

that did not include these three parts

275

00:10:25,709 --> 00:10:29,459

you remove one of these elements and you

276

00:10:27,570 --> 00:10:31,620

have lesser results for example one

277

00:10:29,459 --> 00:10:33,449

study trained phonemic awareness to the

278

00:10:31,620 --> 00:10:35,370

point of proficiency but they didn't do

279

00:10:33,449 --> 00:10:36,750

any phonic training in any extra reading

280

00:10:35,370 --> 00:10:38,399

practice and guess what they didn't get

281

00:10:36,750 --> 00:10:40,800

very good results so you need to have

282

00:10:38,399 --> 00:10:45,540

all three components in place for this

283

00:10:40,800 --> 00:10:47,220

to work studies with the most highly

284

00:10:45,540 --> 00:10:49,110

effective results yield about a standard

285

00:10:47,220 --> 00:10:51,180

deviation improvement in word

286

00:10:49,110 --> 00:10:53,579

identification and these gains are

287

00:10:51,180 --> 00:10:55,680

maintained over time in the studies

288

00:10:53,579 --> 00:10:59,010

without most highly successful outcomes

289

00:10:55,680 --> 00:11:00,560

had three central elements intensive

290

00:10:59,010 --> 00:11:03,060

training of phonemic manipulation

291

00:11:00,560 --> 00:11:05,459

phonics instruction and reading practice

292

00:11:03,060 --> 00:11:07,500

and these three elements seem to

293

00:11:05,459 --> 00:11:08,380

dovetail with the word learning theories

294

00:11:07,500 --> 00:11:11,830

of Ehri

295

00:11:08,380 --> 00:11:18,340

and Share I would suggest that those

296

00:11:11,830 --> 00:11:20,140

represent best practice identify the

297

00:11:18,340 --> 00:11:22,270

three key elements that lead to the most

298

00:11:20,140 --> 00:11:28,930

highly successful outcomes and explain

299

00:11:22,270 --> 00:11:30,400

why they are effective next up we're

300

00:11:28,930 --> 00:11:33,270

going to look at some case examples of

301

00:11:30,400 --> 00:11:33,270

reading difficulties