

MANDEL & ASSOCIATES LTD.

Psychological and Rehabilitation Assessment Specialists

21 September 20	021
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Dear	
RE: Reply to Dr.	report dated 8 September 2021

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Data on the typical level of intelligence or general mental ability seen within a population of teachers is in fact available in the scientific literature. The table below, which is extracted from a book chapter by Dr. Linda Gottfredson², shows that on average teachers' general cognitive ability is above average, estimated at the 81st percentile and equivalent to an IQ score of 113. The cognitive abilities required of teachers is similar to that of accountants, managers, and computer programmers.

g, Jobs and Life 299

medi	se Position Wate to a	0 00 1	00 110	120 128	129
mong	all applied WPT: 1	90 1	00 110	120 128	136
ulb)	for				I raining Potential
1	Research Analyst		T		and the second second
	Editor & Assistant		H		WPT 28 and Over
58	Manager, Advertising		++		Able to gather and synthesize
	Chemist		++	-	information easily; can infer
	Engineer				from couthe job situations
6	Executive				(IQ 116 and above)
	Systems Analyst				
	Auditor		-++-	+	
83	Copywriter				
	Accountant			+	
81	Manager/Supervisor			1	
	Programmer Analyst				WPT 26 TO 30
	Teacher				Above average individuals; can
	Adjuster		_	1 1 1	formal, able to learn much on
77	Manager, General				their own; e.g. independent
	Purchasing Agent				study or reading assignments
	Nurse, Registered				(10 113-120)
70	Administrative Asst				
	Manager, Store				
	Bookkeeper				
	Clerk, Credit	-			
	Draffer, Designer				
56	Manager Assistant				
	Sales, General				
	Sales, Telephone				WPT 20 TO 26
	Secretary				Able to learn routines quickly,
	Clerk, Accounting	-	+++		train with combination of
	Collector, Bad Debt				on the job experience.
60	Ben Cust Smc				(10 100-113)
	Sales Ren. Insurance			1 1	
	Technician	-			
	Automotive Salesman	-			
	Clerk, Typist				
55	Office General				
	Police, Patrol Off.				
	Receptionist	_			WPT 16 to 22
	Cashler		-		Successful in elementary
	Cierical, General		-		settings and would benefit
50	Mater Boater				learning approaches interf
	Printer				tent to allow enough time and
	Teller				"hands on" (on the job)
	Data Entry				experience previous to work.
	Electrical Helper				(10 00 100)
45	Machinist				
	Quality Control Chkr				1
	Claims Clerk				1
	Driver, Deliveryman			11	
	Guard, Security		+ 1		WPT 10 to 17
42	Labor, Unskilled				Need to be "explicitly taught"
	Operator Machine	T			most of what they must seem,
	Arc Welder, Die Sett.	1			apprenticeship program; may
	Mechanic		+		not benefit from "book learning
	Medical-Dental Asst	1 ++-	+ 1		training.
37	Messenger		+ 1		10 00-901
	Production, Factory		+ 1		
	Assembler Food Service Wester		1		
	Nurse's Aide		I		1
31	Warehouseman		+		
1	Custodian & Janitor				MPI 12 OR LESS
25	Material Handler				formalized training setting
	Packer			1 1	automated online almala toola

Figure 15.1: Wonderlic Personnel Test (WPT) scores by position applied for (1992). The bold horizontal line shows the range between the 25th and 75th percentiles. The bold crossmark shows the 50th percentile (median) of applicants to that job. Source: Wonderlic (1992: 20, 26, 27). Reprinted by permission of the publisher.

Beyond the data provided by Gottfredson, there is also empirical data about the intellectual abilities of teachers provided in a paper by Schmidt & Hunter³, which is reproduced here.

SCHMIDT AND HUNTER

Table 1

Mean	GCT	Standard	Scores,	Standar	d Devie	ations,	and	Range o	Scores	of 1	8,782	AAF	White
Enlist	ed Me	n by Chi	lian Oc	cupation	(From	Harrel	1 &	Harrell,	1945, p	2. 2:	1-232	>	

Occupation	N	М	Mdn	SD	Range	
Accountant	172	128.1	128.1	11.7	94-157	
Lawyer	94	127.6	126.8	10.9	96-157	
Engineer	39	126.6	125.8	11.7	100-151	
Public-relations man	42	126.0	125.5	11.4	100-149	
Auditor	62	125.9	125.5	11.2	98-151	
Chemist	21	124.8	124.5	13.8	102-153	
Reporter	45	124.5	125.7	11.7	100-157	
Chief clerk	165	124.2	124.5	11.7	88-153	
Teacher	256	122.8	123.7	12.8	76-155	
Draftsman	153	122.0	121.7	12.8	74-155	
Stenographer	147	121.0	121.4	12.5	66-151	
Pharmacist	58	120.5	124.0	15.2	76-149	
Tabulating-machine operator	140	120.1	119.8	13.3	80-151	
Bookkeeper	272	120.0	119.7	13.1	70-157	
Manager, sales	42	119.0	120.7	11.5	90-137	
Purchasing agent	98	118.7	119.2	12.9	82-153	
Manager, production	34	118.1	117.0	16.0	82-153	
Photographer	95	117.6	119.8	13.9	66-147	

The data (N=256) shows that mean intelligence for teachers (measured with the military's General Classification Test) was 122.8 with a standard deviation of 12.8, just below the scores for other professional occupations such as chemist, auditor, and engineer, and clearly above average.

In another publication by Gottfredson⁴, the following chart is presented. Note that teachers' intellectual abilities are lumped with those of accountants and managers and clearly fall within the above average range (IQ 110 – 125; top 25% of the population).



This data indicates that teachers do in fact typically require above average intelligence, a fact that I was clearly aware of at the time I assessed Ms. That is not to say that there is no variability awongst practising teachers' intelligence. Indeed, the first table by Gottfredson shows that 25% of teachers have an IQ below 103, just as another have an IQ above 120. But there is no data to suggest that a person with a measured IQ of 86 is more likely than not to be able to adequately perform the complex cognitive demands of teaching. Based on my calculations, Ms. measured IQ of 86 is 2 standard deviations below the average requirement for teachers. Mandel & Associates' mission statement is "to provide independent, objective, state-of-the-art assessments that assist in decision making and planning." It is a core value of the company, and one which I fully embrace, to be independent in offering my opinions. teachers' level of intelligence. The data I documented above provides a clear picture of the typical level of intelligence exhibited by teachers and fits with a common sense of understanding of a teacher's capacity. While the studies did not specifically use the WAIS to measure overall intelligence (also referred to as 'gr'), the measures utilized are quite comparable to the WAIS.

I have provided validation for

my methodology and findings. I stand by my opinion that Ms does not possess the overall intellectual ability to function adequately in her former role as a teacher.

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Mary Westcott, Ph.D., R. Psych. (AB#3405) Consulting Psychologist

² Gottfredson, L.S. (2003). Chapter 15 – g, Jobs and Life. Book chapter in: <u>The Scientific Study</u> of General Intelligence: Tribute to Arthur R. Jensen, 293-342.

³ Schmidt, F.L & Hunter, J.E. (2004). General mental ability in the world of work: Occupational attainment and performance. Journal of Personality and Social Psychology, <u>86(1)</u>, 162-173.

⁴ Gottfredson, L.S. (1998). The general intelligence factor. Scientific American, 9, 24-29.

⁸ Schmidt, F. L., & Hunter, J. E. (1998). The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings. <u>Psychological</u> <u>Bulletin</u>, <u>124(2)</u>, 262–274.