

Project Para Assessment
Passing Score Setting Study

Final Report

July 30, 2004

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Passing Score Setting Study for *Project Para Assessment*

Introduction

The purpose of this report is to document the procedures and analyses undertaken to determine recommended defensible passing scores for Project Para Assessment. The report summarizes the procedures and the results of this passing score setting study; it also provides recommendations for the establishment of a cutscore for Project Para Assessment.

Purpose and test description

Title 1 Paraprofessional non regulatory guidelines (USDE March, 2004) state in part:

Paraprofessionals must have the appropriate knowledge and ability to assist in instructing students and be competent in required instructional techniques and academic content areas. Paraprofessionals should also demonstrate that they are competent in basic literacy skills, including the ability to speak and write standard English. (Section C, paragraph C-1)

The Project Para Assessment is intended as a means for Nebraska local education agencies to qualify paraeducator candidates according to NCLB guidelines. The assessment consists of 6 subtests: 3 aimed at academic ability (hereafter referred to as Academic tests) in reading, writing, and mathematics, and 3 aimed at knowledge and ability related to the paraeducator role in the delivery of instruction in reading, writing and mathematics (hereafter referred to as Para Skills tests).

All test items are 4 choice multiple choice. The reading, writing and mathematics Academic tests consist of 28, 25, and 32 items respectively, and the Para Skills tests aimed at the role of paraeducators in assisting in the delivery of instruction in reading, writing, and mathematics consist of 29, 27 and 28 items respectively. Scores are determined by the number of items answered correctly, and are intended to be criterion referenced. The Academic reading and writing subtests consist of narrative passages followed by related multiple choice items. All other subtests consist of stand alone items.

Plans are for the Project Para Assessment to be administered in an online format in which examinees make and submit answer choices via computer. The online administration of the assessment will not be managed by the authors of this report. The assessment will be proctored by local education agency personnel, and scoring will be automatic.

The purposes of this study are a) to provide a range of defensible passing scores to policy makers for the Project Para Assessment. This report focuses on

the results of the passing score setting process for the Project Para Assessment. The report provides an overview of the methods and procedures for the study and includes a recommendation for a range within which policy makers may identify a reasonable passing score to differentiate between paraeducator candidates who have the skills necessary to begin work as paraeducators.

Methods and procedures

The Angoff Method

The Angoff (1971) method entails using expert judges to examine each item on the test and estimate how a typical just qualified examinee will perform on that item. This standard setting method was designed for use with multiple choice items.

The panel of experienced paraeducators who participated in the study were asked to conceptualize (after a training activity) the characteristics of the just qualified paraeducator candidate. Keeping these characteristics in mind, they were directed to indicate, for each multiple choice item, whether the examinee would answer the item correctly or not (Right or Wrong). This was done for each multiple choice item the panelists rated. After an initial rating, actual performance data from a pilot administration of the assessment was provided to the panelists, and they were asked to make a second estimate that could be either the same or different from their first estimate (the data provides a reality check to ensure that expected performance is not set either unrealistically high or low because the paraeducator panelist has misjudged how hard or easy the item actually is). The recommended passing score is based on the second estimate. It is calculated by summing, for each panelist, the number of "right" items and then averaging these values across the panelists.

The method for setting passing scores used a panel of 16 paraeducators. These 16 paraeducators were recruited through ESU's and school districts. An attempt was made to represent a cross section of Nebraska's geography and paraeducator practice, in terms of grade level and subject matter. All participating paraeducators had at least three years of experience.

The paraeducators met at Kearney, Nebraska on July 13, 2004. The Project Para Assessment had been piloted and scored (n=232, representing a range of education and educational experience). At that meeting a) the paraeducators were told the purpose of the meeting, b) the test specifications were reviewed, c) a process for helping the paraeducators conceptualize the just qualified paraeducator was undertaken, d) specific training in the item performance estimation procedure was provided, e) paraeducators made item performance estimates, and f) paraeducators evaluated the passing score setting workshop. These procedures are described in more detail below.

The workshop began with Gerald Giraud discussing the importance of the pass score setting task and the procedures that would take place over the next few hours. Dr. Giraud presented an overview of Project Para Assessment and

provided a general description of the just qualified paraeducator (See attachment 1).

The group of panelists was then split into two groups (n=8), one facilitated by Dr. Giraud and the other by Patrick Irwin, M.A. Dr. Giraud's group focused on Para Skills subtests, and Mr. Irwin's group focused on Academic subtests. Each group discussed the specifications for one of the subtests, and the characteristics of the just qualified paraeducator as related to that subtest. The purpose of this discussion of the just qualified paraeducator was so that all panelists would have a common understanding. Each topic within the subtest table of specifications (TOS) was considered independently.

In each group, a set of practice multiple choice was used for practice. Mr. Irwin's group practiced with Academic math items, and Dr. Giraud's group with Para Skills reading items. These items had been removed from the final version of the assessment after the pilot test, so data was available for feedback. After a discussion and review of the specifications for the respective tests from which the items were taken, and the characteristics of the just qualified paraeducator in relation to these specifications, panelists indicated a 0 or a 1 for each item. A 1 suggested the panelist believed the just qualified paraeducator (JQP) would answer the item correctly and a 0 indicated the panelist believed the JQP would answer incorrectly. When panelists had completed their performance estimates for the items on this practice test, each item was discussed. The discussion, led by Giraud and Irwin, revolved around the panelists' reasons for indicating 1 or 0. Most of the panelists were asked to explain why they had responded 1 or 0 in the context of the general characteristics of the JQP. Panelists were told there was no right answer, that just qualified paraeducators were not expected to all be the same in their ability to answer questions, so some may be able to respond correctly and others not, depending on the item and the characteristics of the JQP.

The panelists were then provided with actual performance data on each item. The performance data for the multiple choice items consisted of the proportion of the pilot examinees who had answered each item correctly (called p-values). The practice tests consisted of items with a range of difficulty. After discussion of all items, the paraeducators were shown the impact of several possible passing scores. The impact data were based on cumulative frequencies that were derived from the pilot examinee performance on these items. This was followed by more discussion of the test and the task. Panelists then made a second judgment for each item.

Following training, each group began the formal process of making judgments on items of the several Academic and Para Skills subtests, following the procedures outlined above, except that panelist made independent judgments on the expected performance of the just qualified paraeducator. Following discussion of each subtest specification and the characteristics of the just qualified paraeducator in relation to the specifications, panelists made an initial judgment of the expected performance of the just qualified paraeducator for each item (1 for correct, 0 for incorrect), followed by feedback as described above. Panelists then made a second judgment, having an opportunity to change their judgment (or not) based on the feedback. The second round judgments were the basis for the recommended passing scores reported here. The

recommended passing scores were calculated by summing, for each panelist, the number of “right” items and then averaging these values across the panelists.

Each group of panelists (led by Dr. Giraud and Mr. Irwin) completed the judgmental process described above for all 6 subtests of the project Para Assessment (3 Academic and 3 Para Skills). Recommended passing scores are based on an n of 16.

The final activity for the panelists was the completion of an evaluation form. After finishing the evaluation form, test forms and other workshop materials were collected. All participants were provided with certificates of participation and the workshop was concluded.

Results

Passing score data

Reported below for each subtest are the mean of panelists passing scores derived from the processes described above, the median, and values 1 and 2 standard errors above and below the mean panelist passing score all expressed in nearest whole values. For each subtest, the percent of pilot test examinees and the percent of pilot examinees self identified as currently working paraeducators that would fail, given the passing scores, is reported. In addition, passing scores for combined subtests are presented with passing scores for the total combined set of subtests.

Academic Reading subtest

	Passing score	% failing	
		all examinees	para examinees
Mean -2 SE	18	8.6	9.1
Mean -1 SE	19	12.1	14.5
Mean	20 (SE = 1)	16.4	16.4
Mean + 1 SE	21	24.6	26.4
Mean + 2 SE	22	31.5	36.4
Median	18.5	see 18 or 19 above	

Academic Writing subtest

	Passing score	% failing	
		all examinees	para examinees
Mean -2 SE	17	12.9	10.0
Mean -1 SE	18	19.3	17.3
Mean	19 (SE = 1)	30.9	30.9
Mean + 1 SE	20	40.3	41.8
Mean + 2 SE	21	54.1	58.2
Median	18	see 18 above	

Academic Mathematics subtest

	Passing score	% failing	
		all examinees	para examinees
Mean -2 SE	20	16.3	15.5
Mean -1 SE	21	20.2	21.8
Mean	22 (SE = 1)	22.7	24.5
Mean + 1 SE	23	28.3	29.1
Mean + 2 SE	24	33.9	33.6
Median	20.5	see 21 or 20 above	

Para Skills Reading subtest

	Passing score	% failing	
		all examinees	para examinees
Mean -2 SE	16	13.3	10.9
Mean -1 SE	17	17.6	13.6
Mean	18 (SE = 1)	22.7	20.9
Mean + 1 SE	19	29.2	29.1
Mean + 2 SE	20	35.2	38.2
Median	16.5	see 16 or 17 above	

Para Skills Writing subtest

	Passing score	% failing	
		all examinees	para examinees
Mean -2 SE	13	9.1	10.0
Mean -1 SE	14	13.4	16.4
Mean	15 (SE = 1)	19.8	23.6
Mean + 1 SE	16	26.7	31.8
Mean + 2 SE	17	35.8	40.9
Median	14.5	see 14 or 15 above	

Para Skills Mathematics subtest

	Passing score	% failing	
		all examinees	para examinees
Mean -2 SE	20	11.6	10.9
Mean -1 SE	21	17.6	20.0
Mean	22 (SE = 1)	24.9	25.5
Mean + 1 SE	23	35.2	37.3
Mean + 2 SE	24	46.4	47.3
Median	21.5	see 21 or 22 above	

Academic total score

	Passing score	% failing	
		all examinees	para examinees
Mean -2 SE	55	12.9	13.6
Mean -1 SE	58	16.7	17.3
Mean	61 (SE = 3)	22.3	20.0
Mean + 1 SE	64	35.6	28.2
Mean + 2 SE	67	41.2	44.5
Median	60	18.9	19.1

Para Skills total score

	Passing score	% failing	
		all examinees	para examinees
Mean -2 SE	49	11.2	8.2
Mean -1 SE	52	14.6	11.8
Mean	55 (SE = 3)	19.7	18.2
Mean + 1 SE	58	31.8	33.6
Mean + 2 SE	61	42.1	46.4
Median	53	18.5	15.5

Project Para Assessment Total score

	Passing score	% failing	
		all examinees	para examinees
Mean -2 SE	110	16.3	15.5
Mean -1 SE	113	18.9	18.2
Mean	116 (SE = 3)	21.0	20.9
Mean + 1 SE	119	24.9	24.5
Mean + 2 SE	122	29.6	32.3
Median	116.5	21.0	20.9

Workshop Evaluation

At the conclusion of the Passing Score Setting Workshop, panelists completed an evaluation form consisting of four parts. Part 1 focused on the orientation and training; Part 2 focused on Round 1 of the ratings and on the levels of confidence and comfort in making the performance estimates and on the amount of time allowed to make the ratings; Part 3 contained questions about Round 2 and level of understanding of the item performance data and impact information that was provided, the degree of confidence and comfort in the performance estimates made, and on the level of confidence they had that the final standard will be appropriate. The overall workshop quality was assessed in Part 4. An open-ended item asking about recommended changes that might be made to improve the workshop or make future workshops run more smoothly was also included at the end of Part 4.

Part 1: Training. On a scale ranging from 1 - 6, where 1 = Very Unsuccessful and 6 = Very Successful, on average, the panelists rated all components of the training greater than 5 (Orientation mean = 5.4, Training on Method mean = 5.06, Description of JQP mean = 5.25, Practice with Method mean = 5.12, Interpretation of Feedback mean = 5.25, and Overall Training mean = 5.31).

Panelists also rated the adequacy of the time provided for training and orientation. On a six-point scale, where 1 = Totally Inadequate and 6 = Totally Adequate, all ratings exceeded 5 (Orientation mean = 5.5, Training on Method mean = 5.2, Description of JQP mean = 5.4, Practice with Method mean = 5.25, Interpretation of Feedback mean = 5.31, and Overall Training mean = 5.37).

When asked to rate the amount of time allocated to training, the average rating was 2, where a value of 2 was "The right amount of time was allocated to training." However, 1 panelist felt that not enough time was allocated to training, and 1 felt that too much time was allocated.

Part 2: Round 1 Ratings. The panelists' confidence in their ability to provide meaningful ratings in Round 1 was over 3 (mean) on a four-point scale (1 = Not Confident and 4 = Confident). One panelist responded 2 (somewhat not confident). The average Comfort rating on the 4-point scale (1=Not Comfortable and 4= Comfortable) for the Round 1 rating was 3.33.

The final item in Part 2 asked about the adequacy of time allocated for making the item ratings. On the four-point scale (1 = More time needed and 4 = More than enough time was allotted), the average rating was 3.07.

Part 3: Round 2 Rating: All of the panelists felt that their understanding of the actual performance data and impact data associated with the Round 2 performance standard was at least "Adequate" on a four-point scale where 1 = Totally Inadequate and 4= Totally Adequate. The average response on the 4-point scales associated with the level of understanding of the actual performance data was 3.37 and for the impact data 3.43.

When asked about their levels of confidence and comfort in making their round 2 performance estimates, the mean ratings were 3.43 and 3.5 respectively. Thus, these ratings were slightly higher for the Round 2 ratings than for the Round 1 ratings of confidence and comfort in the ratings.

The ratings for the allocation of time for making the Round 2 ratings was similar to the ratings for Round 1. The mean for Round 2 was 3.3 with one panelist indicating that the time was just barely enough.

The first item in Part 4 asked about the panelists' confidence in the standard that would result from their Round 2 ratings. The average level of confidence was 3.5 on a four-point scale (1 = Not Confident and 4 = Confident). Thus, the average panelist was more than "Somewhat Confident" about the appropriateness of the passing standard. All panelists rated this as 3 or 4.

Part 4: Overall Evaluation of the Standard Setting Workshop.

The first item in Part 4 asked about the panelists' confidence in the standard that would result from their Round 2 ratings. The average level of confidence was 3.5 on a four-point scale (1 = Not Confident and 4 = Confident). Thus, the average panelist was more than "Somewhat Confident" about the appropriateness of the passing standard. All panelists rated this as 3 or 4.

Two questions asked panelists to rate (1 = Totally Unsuccessful and 4 = Totally Successful) the success and coordination of the workshop. The average ratings on these two items was 3.37 and 3.18, respectively.

Panelists were given an opportunity to provide comments they felt would be helpful in planning future standard setting studies. No panelist offered suggestions for improving the workshop.

Panelist's evaluation of their experience in the pass score setting workshop was positive. The panelists, in general, indicted confidence in the process used to set a cutscore in round two of the Modified Angoff Method. These factors lead to the conclusion that selection of a cutscore within the range of recommended cutscore will result in making reasonably accurate classifications of paraeducator candidates as just qualified.

Recommended Passing Scores

The passing score for Project Para assessment can be set in different ways. Psychometrically defensible passing scores for six subtests are suggested above. Passing scores for combined Academic test score and for combined Para Skills score are also suggested. Finally, passing score options are presented for the combined total Project Para Assessment score. Among commonly considered factors in determining passing scores are the percent of likely examinees who might fail at different defensible passing scores, and the impact that might have on local education agencies. One option might be to set one passing score for the combined Academic tests, and then a separate passing score for each of the 3 Para Skills subtests, on the theory that candidates may seek training to improve their knowledge and skills in a particular subtest content domain having passed one or two subtests but failed others.

The authors of this report recommend that defensible passing scores at or below the mean or median scores presented here be seriously considered. For example, the passing score suggested by the mean pass score derived from the Angoff (1971) described above is 116. Empirical evidence to support this level of passing score can be found in the comparison of mean test scores for Project Para Assessment total score. The mean total score for the lowest educational level of currently practicing paraeducators was approximately 122, compared to 109 for non educator examinees at the same education level. Thus, a passing score of 116 would fail fewer paraeducators than non paraeducators at the same educational level. For example, at the education level of 12-13 years, a pass score of 116 would fail 60 % of examinees in the non educator category, and only 30% of examinees who are currently paraeducators. At the 14 year education level (the target of the Academic subtests), 30 % of non educator examinees fail at a pass score of 116, and only 15% of paraeducators. Refer to the Project Para Assessment total score frequency distribution in Attachment 2 for other comparisons.

References

Angoff, W. H. (1971). Scales, norms, and equivalent scores. In R. L. Thorndike (Ed.), *Educational Measurement, 2nd Edition*, Washington, DC: American Council on Education.

Attachment 1: Descriptions of Just Qualified Paraeducator

Descriptions of the qualified paraeducator.

Paraprofessionals must have the appropriate knowledge and ability to assist in instructing students and be competent in required instructional techniques and academic content areas. Paraprofessionals should also demonstrate that they are competent in basic literacy skills, including the ability to speak and write standard English.

Para skills Reading

Qualified paraeducator candidates have the knowledge and ability to assist in instructing students and be competent in techniques for reading instruction appropriate for the role of paraeducator. The qualified paraeducator candidate will be able to understand and follow the written and spoken instructions of teachers or directions included in instructional materials. The qualified paraeducator is competent in basic literacy skills, including the ability to speak and write standard English.

Para skills Writing

Qualified paraeducator candidates have the knowledge and ability to assist in instructing students and be competent in techniques for writing instruction appropriate for the role of paraeducator. The qualified paraeducator is competent in basic literacy skills, including the ability to speak and write standard English.

Para skills Math

Qualified paraeducator candidates have the knowledge and ability to assist in instructing students and be competent in basic techniques for mathematics instruction appropriate for the role of paraeducator. The qualified paraeducator candidate will be able to understand and follow the written and spoken instructions of teachers or instructions included in instructional materials.

Academic Reading

The qualified paraeducator candidate will be able to understand and follow the written and spoken instructions of teachers or directions included in instructional materials. The qualified paraeducator is competent in basic literacy skills, including the ability to read understand and interpret written materials intended for students and adults.

Academic Writing

The qualified paraeducator candidate will be able to understand and follow the written and spoken instructions of teachers or instructions included in instructional materials. The qualified paraeducator is competent in basic literacy skills, including the ability to speak and write standard English. The qualified paraeducator will have writing skills sufficient to effectively communicate in writing with adults and students.

Academic Mathematics

The qualified paraeducator is competent in mathematics skills appropriate for the role of paraeducator assisting mathematics instruction. The qualified

paraeducator will be able to perform standard mathematics operations consistent with typical basic mathematics tasks undertaken by adults.

Attachment 2: Frequency Distribution Years of Education by
Occupation by test score

Grouping Variable	Level of education	Valid	Score	Frequency	Percent	Valid Percent	Cumulative Percent			
Non-educators	12 years +	Valid	37.00	1	4.0	4.0	4.0			
			53.00	1	4.0	4.0	8.0			
			56.00	1	4.0	4.0	12.0			
			82.00	2	8.0	8.0	20.0			
			98.00	2	8.0	8.0	28.0			
			99.00	1	4.0	4.0	32.0			
			104.00	2	8.0	8.0	40.0			
			106.00	2	8.0	8.0	48.0			
			111.00	1	4.0	4.0	52.0			
			112.00	1	4.0	4.0	56.0			
			113.00	1	4.0	4.0	60.0			
			116.00	1	4.0	4.0	64.0			
			117.00	1	4.0	4.0	68.0			
			120.00	1	4.0	4.0	72.0			
			125.00	1	4.0	4.0	76.0			
			130.00	1	4.0	4.0	80.0			
			131.00	1	4.0	4.0	84.0			
			133.00	1	4.0	4.0	88.0			
			137.00	1	4.0	4.0	92.0			
			138.00	1	4.0	4.0	96.0			
			145.00	1	4.0	4.0	100.0			
			Total			25	100.0	100.0		
			14 years +	Valid	Valid	94.00	1	7.7	7.7	7.7
						99.00	1	7.7	7.7	15.4
						101.00	1	7.7	7.7	23.1
103.00	1	7.7				7.7	30.8			
125.00	1	7.7				7.7	38.5			
128.00	1	7.7				7.7	46.2			
132.00	1	7.7				7.7	53.8			
133.00	1	7.7				7.7	61.5			
135.00	1	7.7				7.7	69.2			
138.00	1	7.7				7.7	76.9			
147.00	1	7.7				7.7	84.6			
153.00	1	7.7				7.7	92.3			
154.00	1	7.7				7.7	100.0			
Total						13	100.0	100.0		
15 years +	Valid	Valid				94.00	2	5.1	5.1	5.1
						97.00	1	2.6	2.6	7.7
						98.00	1	2.6	2.6	10.3
						112.00	1	2.6	2.6	12.8
						114.00	1	2.6	2.6	15.4
						116.00	1	2.6	2.6	17.9
			117.00	1	2.6	2.6	20.5			
			119.00	1	2.6	2.6	23.1			
			122.00	1	2.6	2.6	25.6			
			123.00	2	5.1	5.1	30.8			
			127.00	2	5.1	5.1	35.9			
			128.00	1	2.6	2.6	38.5			
			129.00	3	7.7	7.7	46.2			
			131.00	3	7.7	7.7	53.8			

			139.00	1	2.6	2.6	66.7
			140.00	1	2.6	2.6	69.2
			141.00	1	2.6	2.6	71.8
			142.00	1	2.6	2.6	74.4
			143.00	2	5.1	5.1	79.5
			144.00	1	2.6	2.6	82.1
			145.00	1	2.6	2.6	84.6
			146.00	1	2.6	2.6	87.2
			147.00	2	5.1	5.1	92.3
			148.00	1	2.6	2.6	94.9
			150.00	1	2.6	2.6	97.4
			152.00	1	2.6	2.6	100.0
			Total	39	100.0	100.0	
	17 years +	Valid	118.00	1	4.5	4.5	4.5
			125.00	1	4.5	4.5	9.1
			130.00	1	4.5	4.5	13.6
			131.00	1	4.5	4.5	18.2
			135.00	1	4.5	4.5	22.7
			137.00	1	4.5	4.5	27.3
			138.00	1	4.5	4.5	31.8
			139.00	2	9.1	9.1	40.9
			140.00	1	4.5	4.5	45.5
			141.00	1	4.5	4.5	50.0
			142.00	2	9.1	9.1	59.1
			143.00	1	4.5	4.5	63.6
			144.00	2	9.1	9.1	72.7
			145.00	1	4.5	4.5	77.3
			146.00	1	4.5	4.5	81.8
			147.00	1	4.5	4.5	86.4
			148.00	1	4.5	4.5	90.9
			149.00	1	4.5	4.5	95.5
			153.00	1	4.5	4.5	100.0
			Total	22	100.0	100.0	
Para	12 years +	Valid	76.00	1	2.5	2.5	2.5
			77.00	2	5.0	5.0	7.5
			95.00	1	2.5	2.5	10.0
			96.00	1	2.5	2.5	12.5
			107.00	1	2.5	2.5	15.0
			109.00	2	5.0	5.0	20.0
			111.00	1	2.5	2.5	22.5
			113.00	1	2.5	2.5	25.0
			114.00	1	2.5	2.5	27.5
			117.00	1	2.5	2.5	30.0
			118.00	2	5.0	5.0	35.0
			119.00	3	7.5	7.5	42.5
			120.00	2	5.0	5.0	47.5
			122.00	1	2.5	2.5	50.0
			123.00	1	2.5	2.5	52.5
			124.00	1	2.5	2.5	55.0
			125.00	1	2.5	2.5	57.5
			123.00	3	7.5	7.5	65.0
			127.00	1	2.5	2.5	67.5
			129.00	1	2.5	2.5	70.0
			130.00	1	2.5	2.5	72.5
			133.00	1	2.5	2.5	75.0
			136.00	1	2.5	2.5	77.5

		138.00	1	2.5	2.5	80.0
		139.00	1	2.5	2.5	82.5
		141.00	1	2.5	2.5	85.0
		142.00	1	2.5	2.5	87.5
		146.00	1	2.5	2.5	90.0
		147.00	1	2.5	2.5	92.5
		148.00	1	2.5	2.5	95.0
		151.00	1	2.5	2.5	97.5
		154.00	1	2.5	2.5	100.0
		Total	40	100.0	100.0	
14 years +	Valid	103.00	1	5.3	5.3	5.3
		106.00	1	5.3	5.3	10.5
		107.00	1	5.3	5.3	15.8
		120.00	1	5.3	5.3	21.1
		123.00	1	5.3	5.3	26.3
		123.00	2	10.5	10.5	36.8
		127.00	1	5.3	5.3	42.1
		131.00	1	5.3	5.3	47.4
		132.00	2	10.5	10.5	57.9
		133.00	1	5.3	5.3	63.2
		135.00	2	10.5	10.5	73.7
		136.00	1	5.3	5.3	78.9
		140.00	1	5.3	5.3	84.2
		144.00	1	5.3	5.3	89.5
		149.00	1	5.3	5.3	94.7
		152.00	1	5.3	5.3	100.0
		Total	19	100.0	100.0	
15 years +	Valid	50.00	1	3.1	3.1	3.1
		71.00	1	3.1	3.1	6.3
		104.00	1	3.1	3.1	9.4
		106.00	1	3.1	3.1	12.5
		113.00	1	3.1	3.1	15.6
		117.00	1	3.1	3.1	18.8
		120.00	1	3.1	3.1	21.9
		121.00	2	6.3	6.3	28.1
		129.00	2	6.3	6.3	34.4
		131.00	1	3.1	3.1	37.5
		133.00	1	3.1	3.1	40.6
		135.00	1	3.1	3.1	43.8
		136.00	1	3.1	3.1	46.9
		137.00	2	6.3	6.3	53.1
		140.00	1	3.1	3.1	56.3
		141.00	1	3.1	3.1	59.4
		142.00	2	6.3	6.3	65.6
		143.00	1	3.1	3.1	68.8
		146.00	5	15.6	15.6	84.4
		147.00	1	3.1	3.1	87.5
		148.00	1	3.1	3.1	90.6
		150.00	1	3.1	3.1	93.8
		151.00	1	3.1	3.1	96.9
		153.00	1	3.1	3.1	100.0
		Total	32	100.0	100.0	
17 years +	Valid	103.00	1	4.8	4.8	4.8
		106.00	1	4.8	4.8	9.5
		110.00	1	4.8	4.8	14.3
		112.00	1	4.8	4.8	19.0

		120.00	1	4.8	4.8	23.8
		122.00	1	4.8	4.8	28.6
		125.00	1	4.8	4.8	33.3
		123.00	1	4.8	4.8	38.1
		127.00	1	4.8	4.8	42.9
		131.00	1	4.8	4.8	47.6
		132.00	1	4.8	4.8	52.4
		134.00	1	4.8	4.8	57.1
		136.00	1	4.8	4.8	61.9
		139.00	2	9.5	9.5	71.4
		140.00	1	4.8	4.8	76.2
		146.00	1	4.8	4.8	81.0
		148.00	1	4.8	4.8	85.7
		149.00	2	9.5	9.5	95.2
		151.00	1	4.8	4.8	100.0
		Total	21	100.0	100.0	
Teachers 15 years +	Valid	63.00	1	14.3	14.3	14.3
		135.00	1	14.3	14.3	28.6
		143.00	1	14.3	14.3	42.9
		145.00	1	14.3	14.3	57.1
		147.00	1	14.3	14.3	71.4
		149.00	1	14.3	14.3	85.7
		150.00	1	14.3	14.3	100.0
		Total	7	100.0	100.0	
17 years +	Valid	120.00	1	7.1	7.1	7.1
		128.00	1	7.1	7.1	14.3
		129.00	1	7.1	7.1	21.4
		135.00	1	7.1	7.1	28.6
		136.00	1	7.1	7.1	35.7
		141.00	1	7.1	7.1	42.9
		143.00	2	14.3	14.3	57.1
		148.00	1	7.1	7.1	64.3
		149.00	1	7.1	7.1	71.4
		151.00	1	7.1	7.1	78.6
		152.00	1	7.1	7.1	85.7
		153.00	1	7.1	7.1	92.9
		154.00	1	7.1	7.1	100.0
		Total	14	100.0	100.0	