Item Limits

The WRQ allows an occupational specialist to set statistical filters or "item limits" on job elements that reflect disability or functional limitations. Setting item limits constrains the job-matching algorithm to segregate jobs that have PAQ ratings in excess of item limit values to one part of the report. and jobs that have no PAQ ratings in excess of limit values to another part of that report.

To cite a case example: an Accounting Clerk had a permanent low back impairment that significantly reduced her sitting tolerance. She disliked her accounting job, so it did not make sense to pursue an ergonomic solution such as a sit-stand desk. She needed an occupation that made use of her transferrrable skills and that required less sitting; say only half as much sitting, as the Accounting Clerk's job.

The first step might be to check the existence of the Accounting Clerk job in the PAQ database. Since Accounting Clerk is a common job, the odds are high that the job is in the database. The next step is to check the sitting requirements on that job. Click on the third choice in the **Choose an evaluation method** screen above, which points to the **Examine PAQ ratings for one job**, screen below that offers to list job titles in the PAQ datbase that begin with one of those letters.

Sometimes it is more convenient to enter the first few letters of the job title in the data blank (especially when a long list of jobs begin with a particular letter, "S," for example). In this case, we clicked "A" to open the **Examine ratings for one job** screen that lists jobs starting with "A" below (and that shows only a few of the "A" jobs listed):

Clicking the hotlink to Accounting Clerk points to PAQ ratings for that job below:

Worker Rehabilitation Questionnaire

You are currently logged in as: **David Robinson**   Account Settings   Start   Exit

| 1 **Choose an Evaluation Method** | 2 **View Ratings for One Job** | 3 **Set Item Limits for This Job?** | | |

Examine ratings for Accounting Clerk (216.482-010)

Job Title:	Accounting Clerk
DOT Number:	216.482-010
PAQ Number:	002775

Item Number	Item	Rating
1	Reading words	2.3
2	Using numbers	3.4
3	Using graphics	0.4
4	Using patterns	0
5	Using information displays	1
6	Using measuring devices	0.1
7	Watching machines in use	0.5
8	Watching things you are working with	0.4
9	Watching features of nature	0
10	Inspecting constructed things	0
11	Watching people or animals	0.4
12	Watching events around you	0.3
13	Viewing artistic work	0
14	Listening to speech	2.4
15	Listening to other sounds	0.5

Scrolling down the **Examine ratings for Accounting Clerk (216.482-010**) page above to Item #108 Sitting shows a PAQ rating of 3.7 on this job.

103	Powered water vehicles	0
104	Air or space vehicles	0
105	Mobile equipment operated by human power	0.1
106	Operating equipment	0
107	Remote-controlled equipment	0
108	Sitting	3.7 ←
109	Standing	0.9
110	Walking/running	1.2
111	Climbing	0

Check the definition of Sitting to see how much a PAQ rating of 3.7 involves. The third hotlink in the navigation bar illustrated in the second screen above blinks **Set Item Limits for This Job?,** so click that when it blinks on and it points to the **Summary of Ratings and Item Limits** screen below:

Worker Rehabilitation Questionnaire

You are currently logged in as **David Robinson** Account Settings Start Exit

| 1 Choose an Evaluation Method | 2 Setup / Open Case | 3 Select Database | 4 Rate Capabilities and Tolerances | 5 Ratings Summary | 6 Run Job Matching Analysis and Generate Reports |

Summary of Ratings and Item Limits

Setting Ratings and Limits from job:

Job Title: Accounting Clerk
DOT Number: 216.482-010
PAQ Number: 002775

`108` [Go To Item] *(ber)*

Item #	Description	Rating	Limit
1	Reading words	2.3	
2	Using numbers	3.4	
3	Using graphics	0.4	
4	Using patterns	0	
5	Using information displays	1	
6	Using measuring devices	0.1	
7	Watching machines in use	0.5	
8	Watching things you are working with	0.4	
9	Watching features of nature	0	
10	Inspecting constructed things	0	
11	Watching people or animals	0.4	
12	Watching events around you	0.3	
13	Viewing artistic work	0	
14	Listening to speech	2.4	
15	Listening to other sounds	0.5	
16	Touching	0.3	
17	Smelling	0	
18	Tasting	0	
19	Using far vision	0.3	

Definition of Item Limits

Item Limits Decision Rule

Review the Last Selected Item

Save All Changes

Print Ratings and Item Limits

☑ Show tip about setting an item limit on education

Just above Item #1 Reading words in the screen above, we entered 108 in the box to the left of the **Go To Item** button and clicked that button, which pointed to item 108 below:

101	Highway or rail vehicles	0	
102	Powered mobile equipment	0	
103	Powered water vehicles	0	
104	Air or space vehicles	0	
105	Mobile equipment operated by human power	0.1	
106	Operating equipment	0	
107	Remote-controlled equipment	0	
108	Sitting	3.7	←
109	Standing	0.9	
110	Walking/running	1.2	
111	Climbing	0	
112	Kneeling or stooping	0.2	
113	Working indoors in high temperatures	0	
114	Working indoors in low temperatures	0	
115	Working outdoors	0	
116	Working in impure air	0	
117	Working with vibrating equipment	0	
118	Working under poor lighting	0	

Notice that all the job elements are hotlinks. Clicking on the Sitting hotlink points to that item's definition below:

Worker Rehabilitation Questionnaire

You are currently logged in as: **David Robinson** Account Settings Start Exit

| 1 Choose an Evaluation Method | 2 Setup / Open Case | 3 Select Database | 4 Rate Capabilities and Tolerances | 5 Ratings Summary | 6 Run Job Matching Analysis and Generate Reports |

Item #108: Sitting

This item reflects time spent at a desk, workstation (e.g., electronics assembly line, data entry station), and other seated activities. Many office workers will receive very high ratings (4 or even 5) on this item.

Distribution of the 2,491 jobs in the full WRQ job database:
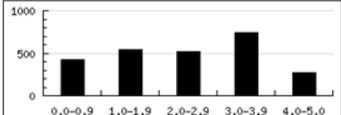
Median 2.2

How the Median can be used to anchor item ratings

Examples of jobs in the PAQ database that are rated at each rating scale point:

Level	Job Title
0.0 - 0.9	(None)
1.0 - 1.9	Sheet Metal Worker; Automobile Mechanic (Less than one hour)
2.0 - 2.9	Refinery Operator; Construction Inspector (One hour to two and one half hours)
3.0 - 3.9	Electronics Technician; Inventory Clerk; Librarian; Control Panel Operator (Two and one half hours to five hours)
4.0 - 4.9	Claim Examiner; Key Entry Operator (More than five hours)
5.0	Telephone Solicitor (Almost continually)

To what extent is this individual capable or tolerant of this item?

Rate this Item 3.7 on a scale of 0.0 (not capable or not tolerant) to 5.0 (highly capable or highly tolerant) Instructions for Rating Items

Limit this Item Definition of Item Limits Item Limits Decision Rule

Previous Item (107) Next Item (109) Go to item: Pro ■■■■■■■■■■

Save Evaluation Close Evaluation Print Continue (Ratings Summary) ▶

Recalling that the PAQ rating for Item #108 Sitting on the Accounting Clerk job is 3.7, we see by checking the **Level** by **Job Title** table in the **Item #108 Sitting** screen that jobs such as Electronics Technician, Inventory Clerk, Librarian and Control Panel Operator have PAQ ratings between 3.0 – 3.9, and that these jobs require sitting two and one half to five hours. Since the PAQ rating for Accounting Clerk is 3.7, we infer that that job requires sitting closer to five hours than two and one half. Since we intend to search for jobs that require only half as much sitting as the Accounting Clerk's, we see that jobs rated at 1.0 and 1.9 require sitting less than one hour. We note that the next higher level of sitting, 2.0-2.9 requires one hour to two and one half hours, which might be too long. Clicking on **Ratings Summary** in position 5 of the navigation bar in the screen above, returns us to the **Summary of Ratings and Item Limits** screen below:

Worker Rehabilitation Questionnaire

You are currently logged in as: **David Robinson** Account Settings Start Exit

1 Choose an Evaluation Method	2 Setup / Open Case	3 Select Database	4 Rate Capabilities and Tolerances	5 Ratings Summary	6 Run Job Matching Analysis and Generate Reports

Summary of Ratings and Item Limits

Setting Ratings and Limits from job:

Job Title:	Accounting Clerk
DOT Number:	216.482-010
PAQ Number:	002775

[____] [Go To Item] *(number)*

Item #	Description	Rating	Limit
1	Reading words	23	
2	Using numbers	34	
3	Using graphics	04	
4	Using patterns	0	
5	Using information displays	1	
6	Using measuring devices	01	
7	Watching machines in use	05	
8	Watching things you are working with	04	
9	Watching features of nature	0	
10	Inspecting constructed things	0	
11	Watching people or animals	04	
12	Watching events around you	03	
13	Viewing artistic work	0	
14	Listening to speech	24	
15	Listening to other sounds	05	
16	Touching	03	
17	Smelling	0	
18	Tasting	0	
19	Using far vision	03	
20	Using depth vision	01	
21	Using color vision	03	

Definition of Item Limit

Item Limits Decision Rul

Review the
Last Selected Item

Save All
Changes

Print Ratings
and Item Limits

☐ Show tip about setting
an item limit on educatio

Scrolling down to Item #108 (as we did in this case) or entering "108" to the left of the **Go To Item** button and clicking it to point to that item, we can enter 1.8 in the **Limit** column below to set the item limit:

104	Air or space vehicles	0	
105	Mobile equipment operated by human power	0.1	
106	Operating equipment	0	
107	Remote-controlled equipment	0	
108	Sitting	3.7	1.8
109	Standing	0.9	
110	Walking/running	1.2	
111	Climbing	0	
112	Kneeling or stooping	0.2	
113	Working indoors in high temperatures	0	
114	Working indoors in low temperatures	0	
115	Working outdoors	0	

Having set the item limit in the screen above, in the **Summary of Ratings and Item Limits** screen below, we may click icons (seen on the right of the second screen above) to **Review the Last Selected Item, Save All Changes,** which points to set up a case (see how to set up a case), or **Print Ratings and Item Limits**. In this case, are ready to click **Run the Job Matching Analysis and Generate Reports** on the navigation bar below.

Worker Rehabilitation Questionnaire

You are currently logged in as: **David Robinson** Account Settings Start Exit

| 1 Choose an Evaluation Method | 2 Setup / Open Case | 3 Select Database | 4 Rate Capabilities and Tolerances | 5 Ratings Summary | 6 Run Job Matching Analysis and Generate Reports |

Summary of Ratings and Item Limits

Setting Ratings and Limits from job:

Job Title: Accounting Clerk
DOT Number: 216.482-010
PAQ Number: 002775

[108] [Go To Item] *(number)*

Item #	Description	Rating	Limit
1	Reading words	2.3	
2	Using numbers	3.4	
3	Using graphics	0.4	
4	Using patterns	0	
5	Using information displays	1	
6	Using measuring devices	0.1	

Definition of Item Limits

Item Limits Decision Rule

Review the Last Selected Item

After clickinig on **Run the Job Matching Analysis and Generate Reports,** the following tip appears:
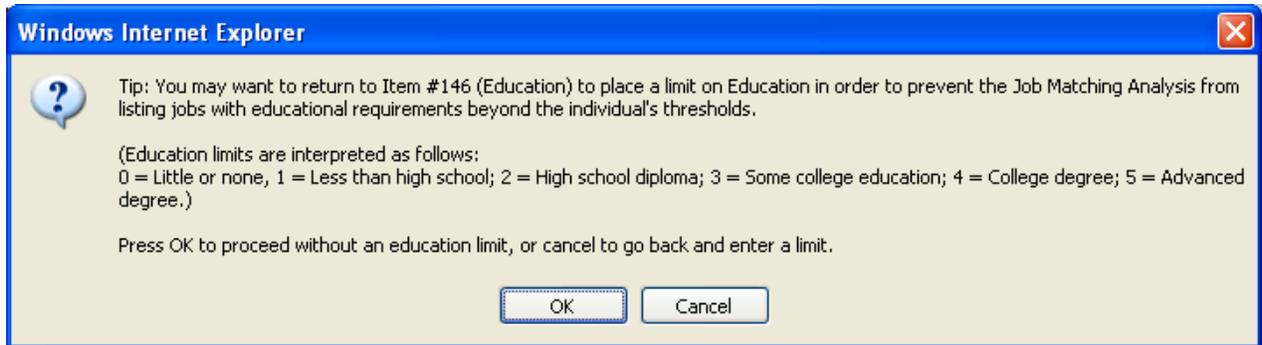
When an individual is unlikely by circumstances, resources, motivation or some other reason to get further education, it may decrease face validity to list closely-matching jobs that require more education than the individual is likely to acquire. For this reason, it may be useful to set an item limit on Item #146 Education to prevent the job matching analysis from listing jobs with unrealistic educational requirements. This tip can be suppressed by unchecking the box on the last icon that appears on the **Summary of Item Ratings and Limits** screen four screens above. After either setting an item limit on Education or by suppressing that tip, the **Please Wait – Performing Matching Process** screen appears:

As we wait for the report, the job-matching algorithm matches ratings of individual capabilities and tolerances with PAQ ratings of all 2,491 jobs in the PAQ database.

At last the report appears listing PAQ items, job analysis ratings and item limits set on the job of Acccounting Clerk below:

Worker Rehabilitation Questionnaire

You are currently logged in as: **David Robinson**   Account Settings   Start   Exit

| 1 Choose an Evaluation Method | 2 Setup / Open Case | 3 Select Database | 4 Rate Capabilities and Tolerances | 5 Ratings Summary | 6 Run Job Matching Analysis and Generate Reports |

View Report

Personal Information

Name:	Unsaved Exam	Insurance Carrier:	N/A
Birth Date:	N/A	Claim #:	N/A
Telephone #:	N/A	Diagnosis:	N/A
Case Notes:	This exam was created by setting item limits on job 216.482-010 - Accounting Clerk.		

This exam has not yet been saved. Click here to save it.

Items	Rating	Limit
1. Reading words	2.3	
2. Using numbers	3.4	
3. Using graphics	0.4	
4. Using patterns	0	
5. Using information displays	1	
6. Using measuring devices	0.1	
7. Watching machines in use	0.5	
8. Watching things you are working with	0.4	
9. Watching features of nature	0	
10. Inspecting constructed things	0	
11. Watching people or animals	0.4	
12. Watching events around you	0.3	
13. Viewing artistic work	0	
14. Listening to speech	2.4	

The **Limit** column is blank until Item # 108, Sitting, which shows the 1.7 limit set on that item:

103. Powered water vehicles	0	
104. Air or space vehicles	0	
105. Mobile equipment operated by human power	0.1	
106. Operating equipment	0	
107. Remote-controlled equipment	0	
108. Sitting	3.7	1.7
109. Standing	0.9	
110. Walking/running	1.2	
111. Climbing	0	
112. Kneeling or stooping	0.2	
113. Working indoors in high temperatures	0	
114. Working indoors in low temperatures	0	
115. Working outdoors	0	
116. Working in impure air	0	
117. Working with vibrating equipment	0	
118. Working under poor lighting	0	

The following section of lists jobs that do not have requirements in excess of item limits (only a few are shown in this example):

Jobs With No Requirements in Excess of Item Limits

Listed below are jobs that are likely within the individual's capabilities and tolerances. The Rank of these jobs represents closeness of match between ratings on the individual and ratings of the jobs in the PAQ database. A Rank of "50" indicates that the job is the 50th closest match. The higher the rank, the less suitable may be the job. The score expresses rank on a scale of 0-99.

DOT Code	Job Title	Rank
217.585-010	Coin-Counter-And-Wrapper	171
208.685-026	Sealing-And-Canceling-Machine Operator	180
290.477-014	Sales Clerk	190
074.382-010	Pharmacy Technician	229
599.585-010	Sterilizer	231
222.687-018	Receiving Checker	249
729.281-010	Audio-Video Repairer	251
822.281-018	Maintenance Mechanic, Telephone	265
022.261-010	Chemical Laboratory Technician	274
207.682-010	Duplicating-Machine Operator I	275
230.663-010	Deliverer, Outside	277
529.387-030	Quality-Control Technician	279
219.367-018	Merchandise Distributor	288
979.682-014	Blueprinting-Machine Operator	289

The next section lists jobs that do have requirements in excess of item limits, such as the following few listed below. The job of Effervescent-Salts Compounder cannot be found on the O*NET, so that job is a false positive. Notice the increasing Item Dif values as jobs require more and more sitting. At the point the list reaches File Clerk I, the sitting requirement is one full rating scale point higher than our item limit, and signals a need for reasonable accommodation under ADA on sitting or rejection of that job as infeasible. (See how to read a report).

Jobs with Requirements in Excess of Item Limits

This is a list of jobs with requirements that exceed item limits. Each job is listed by Dictionary of Occupational Titles code and Job Title. The number just to the right of the job title represents the number of job elements that exceeded item limits. Further to the right are pairs of numbers that represent item numbers (Item) and the sizes of differences (Dif) between item limits and job characteristics (expressed in rating scale points or decimal fractions of a point). Jobs on this list may be appropriate for this individual when differences are small or when reasonable accommodation can be made.

DOT Code	Job Title	Num Limits	1st Item	Dif	2nd Item	Dif	3rd Item	Dif	4th Item	Dif	5th Item	Dif	Rank
209.687-026	Mail Clerk	1	108	0.2	0	0	0	0	0	0	0	0	138
222.687-038	Tooth Clerk	1	108	0.3	0	0	0	0	0	0	0	0	134
559.685-058	Effervescent-Salts Compounder	1	108	0.4	0	0	0	0	0	0	0	0	106
211.362-018	Teller	1	108	0.5	0	0	0	0	0	0	0	0	64
222.387-050	Shipping And Receiving Clerk	1	108	0.5	0	0	0	0	0	0	0	0	114
229.587-014	Quality-Control Clerk	1	108	0.5	0	0	0	0	0	0	0	0	89
239.367-014	Dispatcher, Maintenance Service	1	108	0.6	0	0	0	0	0	0	0	0	96
213.382-010	Computer Peripheral Equipment Operator	1	108	0.6	0	0	0	0	0	0	0	0	131
295.367-022	Safe-Deposit-Box Rental Clerk	1	108	0.6	0	0	0	0	0	0	0	0	69
211.482-014	Food Checker	1	108	0.6	0	0	0	0	0	0	0	0	107
206.387-010	Classification Clerk	1	108	0.8	0	0	0	0	0	0	0	0	132
245.362-010	Medical-Record Clerk	1	108	0.8	0	0	0	0	0	0	0	0	103
222.367-054	Property Clerk	1	108	0.8	0	0	0	0	0	0	0	0	130
222.367-042	Parts Clerk	1	108	0.9	0	0	0	0	0	0	0	0	50
213.362-010	Computer Operator	1	108	0.9	0	0	0	0	0	0	0	0	122
249.367-046	Library Assistant	1	108	0.9	0	0	0	0	0	0	0	0	94
206.387-034	File Clerk I	1	108	1	0	0	0	0	0	0	0	0	76