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ABSTRACT

This research report presents the findings of a survey of adult education centers that was designed to determine the types of accommodations used for adult learners with disabilities and to measure the effectiveness of the accommodations. The report describes a framework for designing strategies to support a learner's performance. In the Ecology of Human Performance (EHP) model, the four accommodation strategy categories used were: (1) establish/restore strategies that address learners' abilities; (2) modify/adapt strategies that address features of the context and the task so they support the person's performance; (3) alter strategies, which address the possible need to find an optimal context for the learner; and (4) prevention strategies, which address the ability to anticipate a problem in the future. Results of the survey indicate that the accommodations used most often tended to be ones that did not require any type of special equipment. Other accommodations tended to be ones that appeared to be the simplest to deliver, most involving modification of the learning task, as opposed to modifying the learning environment. Appendices include tables listing the accommodations used by the adult learning centers; the frequency that each accommodation was used; the satisfaction with the effectiveness of the accommodation; and an accommodations review list. (CR)

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# Research Report on the Use and Effectiveness of Accommodations for Adults with Disabilities in Adult Education Centers

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Most adult educators want to help all of their students learn effectively and efficiently. Some students, however, present special problems. For example, students with disabilities that interfere with learning are attending adult education centers in increasing numbers and many pose significant challenges (McCormick, 1991)). Even knowing their legal responsibilities to provide accommodations for these learners, and despite their best intentions, many adult educators find it difficult to know which accommodations might be effective with specific learners and how effective certain accommodations have been when other adult educators have used them. Given this, staff of a federally funded grant, "Research and Demonstration of a Model for Successfully Accommodating Adults with Disabilities in Adult Education Programs (USDE, #H133A50008)," surveyed adult education centers nationally to determine the types of accommodations adult educators have used and how effective they perceived the accommodations to have been (see Appendix A for a description of the sample of respondents). This document presents the information resulting from this survey. It is hoped that this information will be useful to adult educators as they strive to select effective accommodations for their students with disabilities.

Before presenting the accommodations used in adult education centers it might be helpful to review what an accommodation is. An accommodation is:

any change to a classroom environment or task that permits a qualified student with a disability to participate in the classroom process, to perform the essential tasks of the class, or to enjoy benefits and privileges of classroom participation equal to those enjoyed by adult learners without disabilities. An accommodation is a legally mandated change that creates an equitable opportunity for task completion or environmental access. Further, an accommodation is an individually determined adjustment to a functional need. An accommodation

may include use of equipment or changed environments, procedures, or attitudes (Horton & Hall, 1997, p. 6)

An accommodation is intended to give people with disabilities a fair chance for success, not work that is easier than for others. Guidelines to consider in selecting an accommodation include: (a) is based on documented individual needs; (b) allows the most integrated experience possible; (c) does not compromise the essential requirements of a course or program;(d) does not pose a threat to personal or public safety;(e) does not impose undue financial or administrative burdens on the program; and (f) is not of a personal nature, including personally prescribed devices such as eyeglasses, or services of a personal nature including assistance in eating or toileting (Horton & Hall, 1997, p. 7).

Sometimes it is useful to cluster or organize accommodations around a central theme. Staff of the grant chose to do this using the Ecology of Human Performance (EHP) Model (Dunn, Brown, & McGuignan, 1994). The EHP Model was chosen because it considers the relationships among persons, including what persons want and need to do, and where they need to conduct their activities. According to the EHP, understanding the person also requires understanding the interaction among influences in a person's context; persons influence their context (such as the classroom) and the context influences persons.

The range of a person's performance is determined by considering the person's skills, abilities and experiences and the context within which the person must conduct daily life. A person's performance range can be enhanced or limited by skills and context.

The EHP offers a comprehensive framework for designing strategies (accommodations) to support a learner's performance. This framework encourages learners and educators to consider not only the skills the learner might be able to

develop, but also the skills the learner already has and ways to change tasks and contexts to facilitate successful performance. The EHP does not assume the learner must be “fixed.” Rather, the focus is on the transaction between the learner’s skills and the resources of the context; any aspect that can be addressed to enable more satisfying performance is a viable strategy.

Within the EHP framework there are four accommodation strategy categories for addressing learners’ needs:

Establish/Restore

Modify/Adapt

Alter

Prevent

1) The **ESTABLISH/RESTORE** strategies address learners’ abilities. Here, strategies are designed to take advantage of strengths while working on performance skills that are weak and keep the person from achieving desired outcomes. For example, techniques designed to help a learner improve his or her reading level or learn a new way to solve math problems would fall under this category.

2) The **MODIFY/ADAPT** strategies address features of the context and the task so they support the person’s performance. These strategies acknowledge what the persons strengths and needs are and build around them so weak areas do not interfere with performance. For example, if the learner has poor memory, the educator might suggest using post-it notes in books or a desk arrangement that reminds the learner of important information or tasks. These strategies do not fix the memory problem but keep it from interfering with performance.

3) The **ALTER** strategies address the possible need to find an optimal context for the learner. This means the educator and learner would acknowledge the learners’ skills and needs as well as the natural features of various contexts and search to find

the best possible match between the two. For example, a learner who is distractible finds she can complete independent work more efficiently in an empty room next to the classroom.

4) The **PREVENT** strategies address the ability to anticipate a problem in the future. When using this strategy, remember the problem does not currently exist but is likely to occur in the future if no changes are made in the current pattern of living. We do not have to wait for a person to face failure before offering a strategy for making a situation better. For example, a learner with a vision problem who is working on increasing his reading level may need to take a classroom magnifier home with him so he can read his own mail.

In the EHP framework, the person's specific diagnosis or disability category is not relevant to planning strategies with the person--the focus is on what the person wants and needs to do; in adult basic education, the educator and the learner work together to identify learning strengths and barriers separate from known or unknown disability categories.

The EHP framework can help adult basic educators make systematic decisions about identifying needs and designing strategies that match those needs. The EHP offers adult basic educators a broadly focused but systematic method for planning accommodations to support a person's performance. This framework also provides a mechanism for making decisions about learners' goals and skills, tasks they wish to perform, and for considering contextual supports and barriers to successful performance. The EHP enables adult educators to organize their knowledge and expertise to make decisions about which accommodation strategies would work best for the learner (i.e., establish/restore, modify/adapt, alter, and / or prevent) (Mellard, Gilbert, & Parker, 1997, p. 19-22).

## How to Use the Tables

When designing the survey, the grant staff was faced with the challenge of adequately describing various disability types without overgeneralizing the disability. For example, simply describing a person as having a learning disability communicates little useful information concerning that person's learning needs because learning disabilities are so varied. Therefore, the staff conducted a literature search to determine common learning and behavioral characteristics of adults with disabilities as well as accommodations that had been used with persons demonstrating the characteristics. Thirteen common characteristics and accompanying accommodations were found. These characteristics and accommodations formed the basis of the survey items.

Adult educators were asked to respond whether they had used any of the listed accommodations with an adult demonstrating each of the learning or behavioral characteristics, and if they had, how effective the accommodation had been (see Appendix B for a copy of the directions to the respondents). Respondents were also offered the opportunity to write in accommodations they had used but which were not on the list.

Each table that follows this narrative is centered around one of the thirteen learning or behavioral characteristics used in the survey. Each has five columns. The first column lists the accommodations found in the literature search in descending order according to the percent of adult educators who had used them. This column can be used to learn which accommodations are most frequently used. The second column gives the value for the percent who had used the accommodation, while the third column lists the frequency upon which this percentage is based. As noted above, when respondents had used any of the accommodations listed, they were asked to respond concerning how effective the accommodation had been. This was

done on a scale of 1 to 9, with 1 being ineffective and 9 being effective. The fourth column gives the computed average effectiveness of each accommodation. The fifth column lists for each accommodation the percent of respondents who rated it higher than 5 on the 9 point effectiveness scale. The last column lists the EHP strategy the accommodation represents.

The reader can use the tables to learn what types of accommodations other adult educators have used with specific types of functional limitations and the perceived effectiveness of the accommodations. The reader should remember that students who demonstrate some similar behaviors, such as those in the following tables, may still have vastly different learning and accommodation needs. The tables are simply guides to help adult educators narrow the search for effective accommodations. In addition to considering accommodations based on their effectiveness when used by other adult educators, the reader should also consider their selection based on the EHP framework discussed above. It has proven valuable to adult educators

The reader will probably notice several things about the data in the tables. First, in general, the accommodations used most often tend to be ones that do not require any type of special equipment. Second, the accommodations used more often tend to be ones that at least appear to be the simplest to deliver, most involving modifying the learning task, as opposed to modifying the learning environment. Notice, however, that this does not seem to adversely effect how effective the accommodations are perceived to be. It may be that the simplism accommodations are the most effective. Other resources exist to help adult educators work with adults with disabilities. For example, the “Research and Demonstration of a Model for Successfully Accommodating Adults with Disabilities in Adult Education Programs” grant has also published the following resources:



- Handbook of Rights and Responsibilities of An Adult Learner with a Disability;
- Adult Educator's Procedural Guide to Accommodating Learners with Disabilities; and a
- Compendium of Materials and Resources.

See Appendix C for a further list of accommodations prepared by staff of the grant.

## References

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# Appendix A

Table 1

Accommodations for Learners Who Are Overly Active  
and Have Difficulty Sitting and Working Quietly

Accommodation	Percent Used	N*	Average Effectiveness**	Percent Effective***	EHP Strategy****
Avoid lengthy periods of desk work	85.6	1152	6.67	60.6	P
Organize work area so it is free from distractions	84.3	1115	5.95	43.3	P or MT
Provide a carrel or quiet corner	70.2	1065	6.29	52.2	MC
Use timer	14.4	719	5.40	38.5	MT
Use sound-absorbing surfaces	11.8	690	4.99	27.5	P
Use white noise	5.9	627	4.85	36.0	P

- \* Note: Number of responses to each accommodation.
- \*\* Note: Effectiveness scale goes from 1 to 9, with 1 being ineffective and 9 being effective.
- \*\*\* Note: The % of respondents using this accommodation who rated it higher than 5 on the effectiveness scale.
- \*\*\*\* Ecology of Human Performance (P = Prevent, MT = Modify Task, MC = Modify Context, A = Alter, ER = Establish Restore)

Table 2

Accommodations for Learners Who Are Very Distractible, Daydream  
or Cease Activity Before Completion and Have Trouble Staying on Tasks

Accommodation	Percent Used	N *	Average Effectiveness**	Percent Effective***	EHP Strategy****
Provide checklists for completed assignments and those waiting for attention	85.6	1152	6.28	51.4	MT
Provide specified time frame for task completion	68.3	1054	5.65	35.8	MT
Use carrel	35.0	809	5.93	44.2	A
Use card with a window cut into the frame while reading	13.7	696	5.68	41.7	MT

- \* Note: Number of responses to each accommodation.
- \*\* Note: Effectiveness scale goes from 1 to 9, with 1 being ineffective and 9 being effective.
- \*\*\* Note: The % of respondents using this accommodation who rated it higher than 5 on the effectiveness scale.
- \*\*\*\* Ecology of Human Performance (P = Prevent, MT = Modify Task, MC = Modify Context, A = Alter, ER = Establish Restore)

Table 3

Accommodations for Learners Who Have DifficultyPaying Attention to Oral Directions or the Spoken Word

Accommodation	Percent Used	N*	Average Effectiveness**	Percent Effective***	EHP Strategy****
Give explanations in small, distinct steps	95.5	1216	6.72	60.8	MT
Provide written copy to oral directions and lectures	70.6	1048	6.27	49.2	MT
Have learner repeat directions orally, or use a written clue	68.6	1029	6.58	58.8	MT
Provide visual cues on chalkboard or overhead	68.5	1035	6.65	59.0	MT
Provide study buddy	47.9	895	6.58	57.0	P
Provide tape recorder	38.6	840	5.96	44.9	MT

\* Note: Number of responses to each accommodation.

\*\* Note: Effectiveness scale goes from 1 to 9, with 1 being ineffective and 9 being effective.

\*\*\* Note: The % of respondents using this accommodation who rated it higher than 5 on the effectiveness scale.

\*\*\*\* Ecology of Human Performance (P = Prevent, MT = Modify Task, MC = Modify Context, A = Alter, ER = Establish Restore)

Table 4

Accommodations for Learners Who Have Difficulty

Getting Started, Often Delaying and Procrastinating

Accommodation	Percent Used	N*	Average Effectiveness**	Percent Effective***	EHP Strategy****
Break work into smaller amounts	84.1	1130	6.65	59.6	MT
Help learner set time goals for each task	67.2	1029	6.20	46.6	P
Help learner develop a checklist for each step of task	50.8	919	6.27	53.7	MT
Assign peer coaches	32.9	800	6.52	57.7	MT
Use a timer	17.0	711	5.87	46.8	MT

\* Note: Number of responses to each accommodation.

\*\* Note: Effectiveness scale goes from 1 to 9, with 1 being ineffective and 9 being effective.

\*\*\* Note: The % of respondents using this accommodation who rated it higher than 5 on the effectiveness scale.

\*\*\*\* Ecology of Human Performance (P = Prevent, MT = Modify Task, MC = Modify Context, A = Alter, ER = Establish Restore)

Table 5

Accommodations for Learners Who Have DifficultyUsing the Computer

Accommodation	Percent Used	N*	Average Effectiveness**	Percent Effective***	EHP Strategy****
Use mouse, not keyboard	57.7	802	6.41	52.7	MT
Screen to cut glare	31.0	661	6.60	60.8	P
Table height adjustment	30.4	650	7.14	67.1	MT
Larger display	28.8	641	6.87	67.6	MT
Software for sequential, not simultaneous, key strokes	25.4	612	6.16	49.6	MT
Computer in study carrel	22.3	612	6.50	54.8	ME
Speech recognition	18.8	581	6.20	51.5	MT
Head pointer	3.6	512	5.24	51.7	MT

\* Note: Number of responses to each accommodation.

\*\* Note: Effectiveness scale goes from 1 to 9, with 1 being ineffective and 9 being effective.

\*\*\* Note: The % of respondents using this accommodation who rated it higher than 5 on the effectiveness scale.

\*\*\*\* Ecology of Human Performance (P = Prevent, MT = Modify Task, MC = Modify Context, A = Alter, ER = Establish Restore)



Table 6

Accommodations for Learners Who Have Difficulty Hearing

Accommodation	Percent Used	N*	Average Effectiveness**	Percent Effective***	EHP Strategy****
Visual clues	70.6	750	7.20	72.1	MT
Placement in room	68.9	741	7.03	69.1	MC
Organizational aids (i.e., cue cards)	45.2	622	6.90	67.7	MT
Tactile clues	43.4	611	6.84	64.0	MT
Interpreter	20.8	519	7.18	71.9	MC
Speech amplification device	15.5	513	6.30	62.0	MC
Compressed speech	4.8	438	5.07	20.0	MC

\* Note: Number of responses to each accommodation.

\*\* Note: Effectiveness scale goes from 1 to 9, with 1 being ineffective and 9 being effective.

\*\*\* Note: The % of respondents using this accommodation who rated it higher than 5 on the effectiveness scale.

\*\*\*\* Ecology of Human Performance (P = Prevent, MT = Modify Task, MC = Modify Context, A = Alter, ER = Establish Restore)

Table 7

Accommodations for Learners Who Have DifficultyExpressing Themselves Verbally

Accommodation	Percent Used	N *	Average Effectiveness**	Percent Effective***	EHP Strategy****
Give extra response time	94.8	1350	6.64	62.8	MT
Respond in a written format	62.4	1145	5.82	41.0	MT
Accept alternative forms of information sharing (demonstrations, taped instead of oral report)	59.0	1091	6.19	49.5	MT
Organizational aids (i.e., cue cards)	54.8	1082	6.43	55.4	MT
Computer synthesized speech	13.8	793	6.52	61.0	MT
Communication board	13.6	784	6.14	54.4	MT
Sign language	12.7	779	6.43	56.2	ER - if student is learning; MC - if student is using

\* Note: Number of responses to each accommodation.

\*\* Note: Effectiveness scale goes from 1 to 9, with 1 being ineffective and 9 being effective.

\*\*\* Note: The % of respondents using this accommodation who rated it higher than 5 on the effectiveness scale.

\*\*\*\* Ecology of Human Performance (P = Prevent, MT = Modify Task, MC = Modify Context, A = Alter, ER = Establish Restore)

Table 8

Accommodations for Learners Who Have Difficulty

Reading Class Material and/or Books

Accommodation	Percent Used	N *	Average Effectiveness**	Percent Effective***	EHP Strategy****
Allow extra time	96.8	1433	7.18	72.6	MT
Provide shorter assignments	82.1	1315	6.88	66.7	MT
Allow another learner to read material to learner before the learner is required to read	49.1	1044	6.65	59.9	MT
Use large print	43.1	1019	6.79	65.3	MT
Tape the material and allow reading along	40.4	983	6.86	62.8	MT
Rewrite the student's text	27.9	907	6.49	59.0	MT

\* Note: Number of responses to each accommodation.

\*\* Note: Effectiveness scale goes from 1 to 9, with 1 being ineffective and 9 being effective.

\*\*\* Note: The % of respondents using this accommodation who rated it higher than 5 on the effectiveness scale.

\*\*\*\* Ecology of Human Performance (P = Prevent, MT = Modify Task, MC = Modify Context, A = Alter, ER = Establish Restore)

Table 9

Accommodations for Learners Who Have Difficulty Spelling

Accommodation	Percent Used	N *	Average Effectiveness**	Percent Effective***	EHP Strategy****
Provide dictionary	89.0	1374	5.80	41.5	MT
Allow use of electronic spell checker	37.6	983	6.93	68.5	MT

\* Note: Number of responses to each accommodation.

\*\* Note: Effectiveness scale goes from 1 to 9, with 1 being ineffective and 9 being effective.

\*\*\* Note: The % of respondents using this accommodation who rated it higher than 5 on the effectiveness scale.

\*\*\*\* Ecology of Human Performance (P = Prevent, MT = Modify Task, MC = Modify Context, A = Alter, ER = Establish Restore)

Table 10

Accommodations for Adults Who Have Difficulty

Expressing Themselves in Writing

Accommodation	Percent Used	N *	Average Effectiveness**	Percent Effective***	EHP Strategy****
Give extra time for written assignments and shorten the amount required if possible	89.9	1369	6.78	61.8	MT
Have the learner prepare an outline, brief notes, or short phrases to show knowledge	61.7	1143	6.30	52.4	MT
Accept alternative forms of reporting (i.e., oral report, tape recorders, debates)	54.9	1078	6.67	61.9	MT
Allow student to dictate work to someone else	41.0	997	6.63	59.9	MT

\* Note: Number of responses to each accommodation.

\*\* Note: Effectiveness scale goes from 1 to 9, with 1 being ineffective and 9 being effective.

\*\*\* Note: The % of respondents using this accommodation who rated it higher than 5 on the effectiveness scale.

\*\*\*\* Ecology of Human Performance (P = Prevent, MT = Modify Task, MC = Modify Context, A = Alter, ER = Establish Restore)

Table 11

Accommodations for Adults Who Have DifficultySolving Math Problems

Accommodation	Percent Used	N*	Average Effectiveness**	Percent Effective***	EHP Strategy****
Increased time	93.7	1412	6.93	67.3	MT
Smaller tasks	82.5	1301	6.93	65.8	MT
Calculator	69.2	1223	6.69	60.0	MT
Computer software	68.6	1214	6.84	66.0	MT
Manipulatives	67.3	1191	6.74	59.1	MT
Graph paper	31.3	927	6.23	50.0	MT
Abacus	6.4	753	5.22	37.9	MT

\* Note: Number of responses to each accommodation.

\*\* Note: Effectiveness scale goes from 1 to 9, with 1 being ineffective and 9 being effective.

\*\*\* Note: The % of respondents using this accommodation who rated it higher than 5 on the effectiveness scale.

\*\*\*\* Ecology of Human Performance (P = Prevent, MT = Modify Task, MC = Modify Context, A = Alter, ER = Establish Restore)

Table 12

Accommodations for Adults Who Have DifficultyTaking Tests

Accommodation	Percent Used	N*	Average Effectiveness**	Percent Effective***	EHP Strategy****
Increased time	89.3	1374	7.14	70.7	MT
Separate testing area	72.7	1250	7.09	69.5	MC
Shortened test periods	53.4	1089	7.00	68.7	MT
Reader	38.5	965	7.26	75.2	MT
Large print	35.9	950	7.06	72.2	MT
Computer administration	33.8	919	6.62	62.6	MT
Audio tape presentation of items	26.7	874	7.04	70.6	MT
Spell checker	21.9	846	6.89	73.0	MT
Scribe/recorder	20.1	832	7.20	75.0	MT
Use of record booklet vs. separate answer sheet	17.6	810	6.71	65.4	MT
Braille	3.6	715	6.15	67.6	ER or MT

\* Note: Number of responses to each accommodation.

\*\* Note: Effectiveness scale goes from 1 to 9, with 1 being ineffective and 9 being effective.

\*\*\* Note: The % of respondents using this accommodation who rated it higher than 5 on the effectiveness scale.

\*\*\*\* Ecology of Human Performance (P = Prevent, MT = Modify Task, MC = Modify Context, A = Alter, ER = Establish Restore)

Table 13

Accommodations for Adults Who Have DifficultyWriting Legibly

Accommodation	Percent Used	N *	Average Effectiveness**	Percent Effective***	EHP Strategy****
Extended time for completion	86.7	1320	6.93	65.0	MT
Avoid setting time limits	79.5	1244	6.69	58.5	MT
Use manuscript paper or lined paper	75.4	1228	6.44	54.6	MT
Shortened work intervals	65.9	1166	6.67	59.0	P
Allow learner to type or use word processing	64.2	1123	7.05	67.7	MT
Allow student to copy from near point instead of copying from board	61.8	1097	6.66	59.8	MT
Provide an alphabet chart	51.4	1054	6.44	50.6	MT
Use wideline paper	45.3	995	6.24	44.7	MT
Have learner dictate to someone else	35.9	946	7.02	67.8	MT

Table continues



Table 13 (continued)

Accommodations for Adults Who Have Difficulty

Writing Legibly

Accommodation	Percent Used	N *	Average Effectiveness**	Percent Effective***	EHP Strategy****
Use graph paper to help space letters	19.2	812	6.35	51.4	MT
Adapted work surface	17.9	802	6.58	54.9	MT
Use adapted pencil or pen for better grip	15.7	798	6.01	46.2	MT
Use oversized pencil	13.4	780	5.77	41.0	MT
Use a paper stabilizing device	12.6	760	6.39	52.9	MT
Use universal cuff	3.5	683	5.14	35.7	MT
Use textured paper (raised lines)	2.2	694	5.69	26.9	MT

\* Note: Number of responses to each accommodation.

\*\* Note: Effectiveness scale goes from 1 to 9, with 1 being ineffective and 9 being effective.

\*\*\* Note: The % of respondents using this accommodation who rated it higher than 5 on the effectiveness scale.

\*\*\*\* Ecology of Human Performance (P = Prevent, MT = Modify Task, MC = Modify Context, A = Alter, ER = Establish Restore)

## Appendix B

## Example and Directions

*Now we would like to ask you to think about the types of accommodations you provide for adults with disabilities. We are defining an accommodation as a legally mandated change that creates an equitable opportunity for task completion or environmental access. Further, an accommodation is an individually determined adjustment to a functional need. Such an accommodation is required across settings for the same type of tasks. An accommodation may include use of equipment or changes in environments, procedures, or attitudes.*

Picture in your mind the last three adult learners with disabilities in your program who demonstrated the behaviors listed in Questions Q6 - Q11 (if you have worked with fewer than three, just picture the ones you worked with). The three learners chosen for each question will most likely be different. These three learners will be represented by the letters "A," "B," and "C," below. For each learner we have two questions:

- (1) Did you use the accommodation with any of these learners? This answer is recorded in the column labeled "Used?" by circling yes or no for each learner.
- (2) How effective was the accommodation? This answer is recorded by circling the degree of effectiveness from 1 (Ineffective) to 9 (Effective).

In the example below, the respondent thought of the last three learners with disabilities who have difficulty keeping track of materials and assignments. Three possible accommodations are listed above.

A notebook was used and found effective for Learner A. This accommodation was also used for Learner B but found to be ineffective. The accommodation was not very effective for Learner C.

In the second example a checklist was not used with any of the three learners; therefore "No's" were circled, and there was no response needed on the effectiveness scale.

Finally, the respondent used computers as an accommodation with two of the learners but not the third. The computers were effective with learners A and B.

Accommodation	Used ?		Effectiveness										
			Ineffective			Effective							
a Use a notebook	A	<input checked="" type="radio"/> Yes	No	A	1	2	3	4	5	6	7	8	<input checked="" type="radio"/> 9
	B	<input checked="" type="radio"/> Yes	No	B	<input checked="" type="radio"/> 1	2	3	4	5	6	7	8	9
	C	<input checked="" type="radio"/> Yes	No	C	1	<input checked="" type="radio"/> 2	3	4	5	6	7	8	9
b Provide a checklist	A	Yes	<input checked="" type="radio"/> No	A	1	2	3	4	5	6	7	8	9
	B	Yes	<input checked="" type="radio"/> No	B	1	2	3	4	5	6	7	8	9
	C	Yes	<input checked="" type="radio"/> No	C	1	2	3	4	5	6	7	8	9
c Use computer	A	<input checked="" type="radio"/> Yes	No	A	1	2	3	4	5	6	<input checked="" type="radio"/> 7	8	9
	B	<input checked="" type="radio"/> Yes	No	B	1	2	3	4	5	6	7	<input checked="" type="radio"/> 8	9
	C	Yes	No	C	1	2	3	4	5	6	7	8	9

## Appendix C

## **Accommodations Review List**

- Accept alternative forms of information sharing (demonstrations, taped instead of oral report, debates)
- Accept responses in demonstration or written format
- Adapt work surface (e.g. height)
- Adjust computer table heights
- Allow another learner to read material to learner before the learner is required to read
- Allow close placement in rooms
- Allow extra time to complete assignments
- Allow food in classroom
- Allow learner adequate time to acclimate to new areas, new staff, new learners
- Allow learner to bring support person to class when difficult changes are anticipated
- Allow learner to decide what task to do first, second, third
- Allow learner to read/study at home, where equipment/technology is available that is not available in the classroom
- Allow learner to seek out different sources and intensities of light
- Allow learner to set up own schedule
- Allow learner to sit close to materials that must be viewed
- Allow learner to use a study partner
- Allow learner to wear brimmed cap to reduce glare
- Allow more time; avoid setting time limits
- Allow scribe or tape-recorder
- Allow student to stand up or lie down whenever necessary
- Allow the learner to type or use word processing
- Avoid lengthy periods of desk work
- Break work into smaller amounts
- Change door and aisle widths
- Color code keys on calculator or keypad
- Communication board
- Decrease the need to read handwritten materials, such as notes or comments
- Demonstrate tasks to be completed in small steps
- Eliminate background noise
- Encourage breaks and physical movement during breaks
- Encourage learner to change positions every 10-15 minutes to prevent pain and fatigue
- Encourage learner to wear comfortable clothes
- Enhance contrast of desk edges and other protruding objects with colored tape
- Enhance visibility of small objects with brightly colored tape
- Experiment with different writing utensils (felt tip pen, pen, pencil, oversized pencil)
- Free work area from distractions; use carrel or quiet corner
- Give explanations in small, distinct steps
- Give extra response time
- Have audio-taped presentation of items or for recording responses
- Have group discussions in a semi-circle so hearing impaired can see everyone
- Have learner chew gum, licorice, lollipops
- Have learner repeat directions orally, or use a written clue
- Have learner sit close to the teacher, far from the window, in a study carrel, or near a

quiet corner

- Have learner work with a partner who will cue learner to stay on task
- Have shortened work intervals
- Help learner know what to expect, outline day's plan
- Help learner set time goals for each task
- If student is unable to maintain comfort in class, allow work at home, checking in by phone, or weekly/biweekly at center
- Keep materials in file folder
- Keep room arrangement constant, unless change is required for better access
- List assignments with instructions on the blackboard
- Lower lights, adjust room temperature
- Organizational aids (i.e., cue cards)
- Post daily routine, discuss changes as soon as possible
- Provide a checklist of assignments
- Provide a talking calculator
- Provide adjustable lamp, lighting
- Provide an alphabet chart
- Provide an assistant to read and/or tape items
- Provide an interpreter
- Provide checklists for assignments
- Provide clear, predictable break between two activities
- Provide shorter assignments
- Provide slate and stylus or braille for Braille writing
- Provide specified time frame for task completion
- Provide speech synthesis for reading on the computer screen
- Provide visual cues (such as flashing lights for timed tasks)
- Provide written copy of oral directions and lectures
- Provide yellow acetate overlays or other yellow filter (to enhance print contrast)
- Refer for low vision treatment
- Require less writing
- Rewrite the student's text
- Specify time frame to complete task; use a timer
- Stand directly in front of a learner who is lip reading
- Store cords and other hindrances away from traveled areas
- Tape the material and allow reading along
- Teach alternate methods of holding the writing utensil
- Teach layout of the classroom; provide Braille maps of facilities
- Teach learner to make cue notes
- Try different writing surfaces such as different types of paper, more than one layer, or sandpaper underneath paper
- Use a backpack or briefcase to keep things together
- Use a computer to track materials and assignments
- Use a computer with a larger display
- Use a computer with speech recognition capabilities
- Use a microphone/amplifier combination
- Use a notebook to keep track of materials and assignments
- Use a paper stabilizing device (tape)

Use a timer  
Use a typoscope when reading  
Use adapted computer capabilities, such as Zoom Text  
Use adaptive devices such as grips, rulers, guides, paper with raised lines, or universal cuff  
Use an abacus  
Use appropriate magnification devices  
Use Braille texts  
Use carrel, earplugs  
Use color code or visual cue when correcting learners' papers  
Use compressed speech  
Use computer hardware such as key guard to prevent multiple simultaneous keystrokes  
Use computer software or calculator  
Use computer software such as voice recognition  
Use computer synthesized speech  
Use different kinds of chairs (beanbag, rocking, therapy ball)  
Use different types of input such as audio tapes  
Use earphones (if music decreases distractibility)  
Use fidget objects (paper clips, small balls) to relieve tension  
Use graph paper  
Use graph paper or wide lined paper  
Use large print  
Use large, bolded print texts and materials  
Use larger type face while word processing  
Use lumbar support chair, footstool  
Use manipulatives (e.g. blocks, cuisinaire rods)  
Use mnemonics  
Use print scanner  
Use rocking chair for calming effect  
Use signing, lip reading, or an interpreter  
Use soft, relaxing music (if it is not distracting)  
Use sound absorbing surfaces  
Use step by step checklists for completing tasks  
Use white noise  
Work on only one subject at a time  
Write all assignments in assignment book

## Accommodation Listing by Areas

### Reading

- Rewrite the student's text
- Allow extra time
- Provide shorter assignments
- Allow another learner to read material to learner before the learner is required to read
- Use large print
- Use larger type face while word processing
- Encourage learner to use typoscope
- Tape the material and allow reading along
- Decrease the need to read handwritten materials, such as notes or comments
- Provide a talking calculator
- Allow learner to seek out different sources and intensities of light
- Provide speech synthesis for reading on the computer screen

### Accessing Information with Low Vision

- Refer for low vision treatment
- Use appropriate magnification devices
- Use large, bolded print texts and materials
- Allow extra time
- Provide typoscope
- Allow learner to sit close to materials that must be viewed
- Provide yellow acetate overlays or other yellow filter (to enhance print contrast)
- Provide an assistant to read and/or tape items
- Have audio-taped presentation of items
- Use of a computer with a larger display
- Color code keys on calculator or keypad
- Use adapted computer capabilities, such as Zoom Text
- Allow learner to seek out different sources and intensities of light
- Provide adjustable lamp, lighting
- Allow learner to wear brimmed cap to reduce glare
- Use of a computer with speech recognition capabilities

### Accessing Information with No Vision

- Use Braille texts
- Provide slate and stylus or braille for Braille writing
- Allow learner to read/study at home, where equipment/technology is available that is *not* available in the classroom
- Provide an assistant to read and/or tape items
- Have audio-taped presentation of items or for recording responses
- Use of a computer with speech recognition capabilities
- Use print scanner

### Handwriting

- Provide an alphabet chart



Teach alternate methods of holding the writing utensil  
Use adaptive devices such as grips, rulers, guides, paper with raised lines, or universal cuff  
Use a paper stabilizing device (e.g., Scotch tape)  
Allow the learner to type or use word processing  
Use computer software such as voice recognition  
Use computer hardware such as key guard to prevent multiple simultaneous keystrokes  
Experiment with different writing utensils (felt tip pen, pen, pencil, oversized pencil)  
Try different writing surfaces such as different types of paper, more than one layer, or sandpaper underneath paper  
Use graph paper or wide lined paper  
Adapt work surface (e.g. height)  
Allow more time; avoid setting time limits  
Have shortened work intervals; encourage breaks  
Allow scribe or tape-recorder  
Require less writing

### **Solving math problems**

Have smaller tasks  
Use of manipulatives (e.g. blocks, cuisinaire rods)  
Use of an abacus  
Use of graph paper  
Have shortened work intervals  
Allow extra time  
Use of computer software or calculator

### **Remembering**

Teach learner to make cue notes  
Write all assignments in assignment book  
Use step by step checklists for completing tasks  
Demonstrate tasks to be completed in small steps  
List assignments with instructions on the blackboard

### **Paying Attention to Oral Directions**

Give explanations in small, distinct steps  
Provide written copy of oral directions and lectures  
Provide visual cues on chalkboard or overhead  
Have learner repeat directions orally, or use a written clue

### **Attention to Task**

Free work area from distractions; use carrel or quiet corner  
Use sound absorbing surfaces  
Allow more time to complete assignments  
Use a typoscope when reading  
Use different types of input such as audio tapes  
Avoid lengthy periods of desk work  
Specify time frame to complete task; use a timer

Encourage breaks and physical movement during breaks  
Have learner work with a partner who will cue learner to stay on task  
Use white noise

### **Getting started**

Break work into smaller amounts  
Allow learner to decide what task to do first, second, third  
Help learner set time goals for each task  
Help learner develop a checklist for each step of the task  
Assign peer coaches  
Use a timer

### **Staying on Track**

Provide specified time frame for task completion  
Provide checklists for assignments  
Use carrel, earplugs  
Use earphones (if music decreases distractibility)  
Use a typoscope if learner is distractible while reading

### **Staying Organized**

Use mnemonics  
Use a notebook to keep track of materials and assignments  
Use color code or visual cue when correcting learners' papers  
Keep materials in file folder  
Work on only one subject at a time  
Provide a checklist of assignments  
Use a backpack or briefcase to keep things together  
Use a computer to track materials and assignments

### **Dealing with Change**

Help learner know what to expect, outline day's plan  
Post daily routine, discuss changes as soon as possible  
Allow learner adequate time to acclimate to new areas, new staff, new learners  
Provide clear, predictable break between two activities  
Allow learner to bring support person to class when difficult changes are anticipated

### **Frustration**

Have shortened work intervals  
Allow more time for tasks  
Set up break times; allow physical movement during breaks  
Use rocking chair for calming effect  
use soft, relaxing music (if it is not distracting)  
Use study carrel to decrease distraction  
Allow learner to set up own schedule

### **Accessing Information with Impaired Hearing**

Provide written copy of oral directions and lectures  
Use a microphone/amplifier combination

Provide visual cues (such as flashing lights for timed tasks)  
Allow close placement in rooms  
Stand directly in front of learner  
Provide an interpreter  
Use compressed speech  
Eliminate background noise

### **Accessing Information with No Hearing**

Provide written copy of oral directions and lectures  
Use signing, lip reading, or an interpreter  
Provide visual cues on chalkboard or overhead  
Have group discussions in a semi-circle so hearing impaired can see everyone  
Stand directly under the learner who is lip reading

### **Accessing Facilities with Low or No Vision**

Teach layout of the classroom; provide Braille maps of facilities  
Enhance visibility of small objects with brightly colored tape  
Keep room arrangement constant, unless change is required for better access  
Enhance contrast of desk edges and other protruding objects with colored tape  
Store cords and other hindrances away from traveled areas

### **Expressing Self Verbally**

Accept alternative forms of information sharing (demonstrations, taped instead of oral report, debates)  
Give extra response time  
Use computer synthesized speech  
Communication board  
Use signing or an interpreter  
Accept responses in demonstration or written format  
Organizational aids (i.e., cue cards)  
Allow learner to use a study partner

### **Accessing Facilities in a Wheelchair**

Adjust computer table heights  
Change door and aisle widths  
Store cords and other hindrances away from traveled areas

### **Sitting Tolerance: Sitting Increases Agitation and Distraction From Task**

Use fidget objects (paper clips, small balls) to relieve tension  
Allow food in classroom  
Have learner chew gum, licorice, lollipops  
Encourage learner to wear comfortable clothes  
Use different kinds of chairs (beanbag, rocking, therapy ball)  
Have learner sit close to the teacher, far from the window, in a study carrel, or near a quiet corner  
Lower lights, adjust room temperature  
Encourage breaks; encourage physical movement during breaks

### **Sitting Tolerance: Sitting Causes Pain or Fatigue**

Allow student to stand up or lie down whenever necessary

Allow extra time to complete assignments

Use lumbar support chair, footstool

If student is unable to maintain comfort in class, allow work at home, checking in by phone, or weekly/biweekly at center

Encourage learner to change positions every 10-15 minutes to prevent pain and fatigue



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