

Lessons Learned from a National Survey on Writing Instruction for Students with Visual Impairment

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Writing for students with VIs (A small, but growing research base)

Research suggests:

Many students write at the same level as peers without VIs

(Savaiano & Hebert, 2019)

- Writing difficulties do not seem to be related to braille code (Erin & Wright, 2011)
- Students who are blind may use fewer adjectives than peers (Kreuzer, 2007)





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However...

• The still relatively small amount of research leads teachers to make assumptions about their students'

Example: Some TSVIs indicated that students with multiple disabilities cannot write. Therefore, they do not attempt <u>any</u> writing instruction or assessment (Savaiano & Hebert, 2019).

• Given such assumptions, exploratory research is needed to understand TSVIs beliefs and instructional practices around writing.



A pilot survey of Nebraska TSVIs

(Hebert & Savaiano, 2020)

- Small sample (n= 24)
- 47% indicated teaching writing was their responsibility
- 50% reported receiving adequate training to teach writing
- 100% agreed that all writing purposes are appropriate for all students with VI (i.e., for fun, for daily living, to show knowledge)





Limitations of the Nebraska survey

- Small sample
- Focused on TSVIs in a single state
 - States may have different delivery models and certification requirements
- Did not distinguish between students who are deafblind and those with multiple disabilities

Yet, there is a foundation to build on

• Survey questions had high-reliability –valid for national survey



Purpose of the Current Study

Conduct a national survey to investigate writing instruction from the TSVI's perspective

Research Questions Included:

- 1. How prepared are TSVIs to teach writing?
- 2. What do TSVIs report about their beliefs about writing instruction?
- 3. What are the modes and practices that TSVIs report using with students?
- 4. Do teachers' beliefs and/or experiences predict the proportion of writing practices TSVIs report?

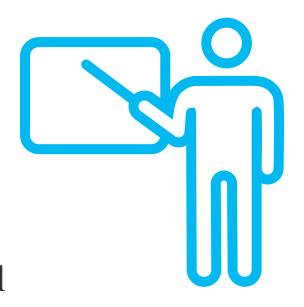




Method

Participant Recruitment:

- Goal to recruit TSVIs from all 50 states
- 3-step plan for recruiting through:
 - Schools for the blind in each state
 - State Departments of Education
 - Universities with programs for TSVIs
- Survey was sent out through listservs or individual TSVI emails (varied by state)

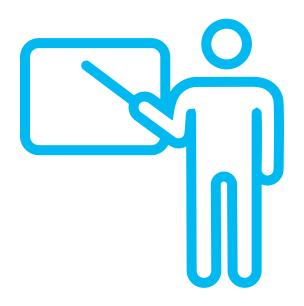


(Savaiano et al., in press)



Survey Instrument

- Included 100 questions about:
 - TSVI caseload,
 - General adaptations and accommodations for writing
 - Preparation to teach writing
 - Preparation to teach students with VI
 - Beliefs/expectations about writing of students with VI
 - Collaboration with general education teachers





Descriptive Statistics

Demog	raphic Variables	N	%
Gender	Female	415	90.8
	Male	35	7.7
	Non-Binary	1	0.2
	Prefer not to Answer	6	1.3
Ethnicity	American Indian	1	0.2
•	Asian	5	1.1
	Black	13	2.8
	Hispanic	3	0.7
	Pacific Islander	1	0.2
	White	423	93.0
	Two or More Races	9	2.0
Education	Bachelor's Degree	77	16.8
	Master's Degree	370	81.0
	Doctoral Degree	10	2.2

Demographic Variables	N	0/0
Work Context		
One School	77	17.0
Multiple Schools in One District	178	39.2
Multiple Schools in Multiple Districts	183	40.3
Other	16	3.5
Years of Experience as TSVI		
Range: 1 – 53		
Mean: $12.6 (SD = 10.2)$		
1-5 years	146	32.0
6-10 years	98	21.5
11-15 years	66	14.5
16-20 years	49	10.7
More than 20 years	97	21.3



Caseload Size

• Total TSVIs = 457

Caseload numbers varied

• Range: 1 − 76

• Median: 16.0

• Mean: 17.2 (SD = 11.6)

 Caseloads also varied by visual condition (see table)

Student Type	Frequency w/	Percent w/ ≥ 1 Student	Mean (SD) # of Students*							
VI: Blind	293	64.1	2.5 (2.6)							
VI: LV	397	86.9	8.1 (7.7)							
Deafblind	218	47.7	2.3 (1.9)							
MD (not DB)	414	90.6	9.3 (8.2)							
Note. *Among Respondents w/ ≥ 1 Student										





Research Question 1: Preparation to Teach Writing

- Variability in university preparation to teach writing
 - 36.7% took a course on teaching writing
 - 37.3% did not
 - 26% couldn't remember

Preparation to teach writing to support students' learning	None (1)	Minimal (2)	Adequate (3)	Extensive (4)	Mean (SD)
Formal training during college	12.4%	42.4%	37.1%	8.1%	2.4 (0.8)
Formal training after college (e.g., PD)	18.0%	46.9%	30.4%	4.7%	2.2 (0.8)
Completed on their own	9.1%	31.8%	48.4%	10.7%	2.6 (0.8)



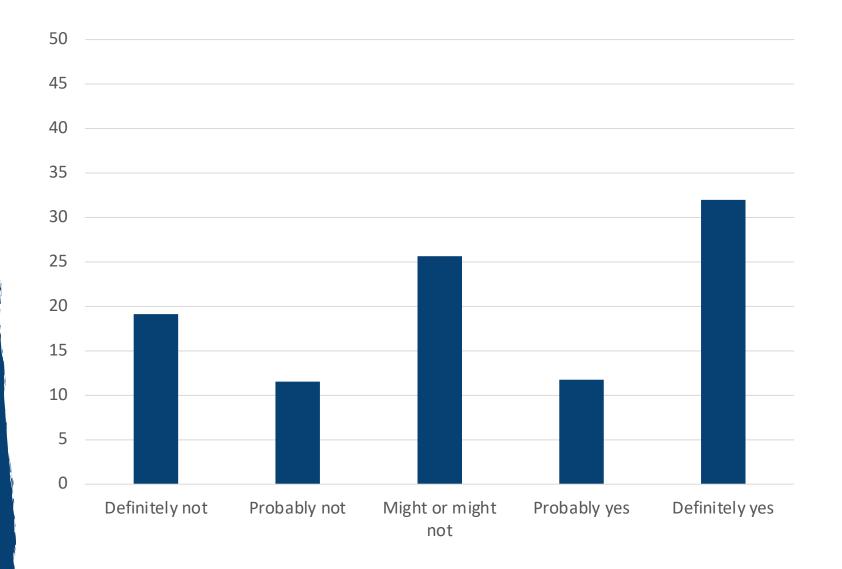
Research Question 2: TSVIs' Beliefs about Writing Instruction

Survey Questions were separated into four primary factors:

- Beliefs about responsibility for teaching writing
- Beliefs about value of teaching writing
- Self-efficacy for teaching writing
- Collaboration to teach writing

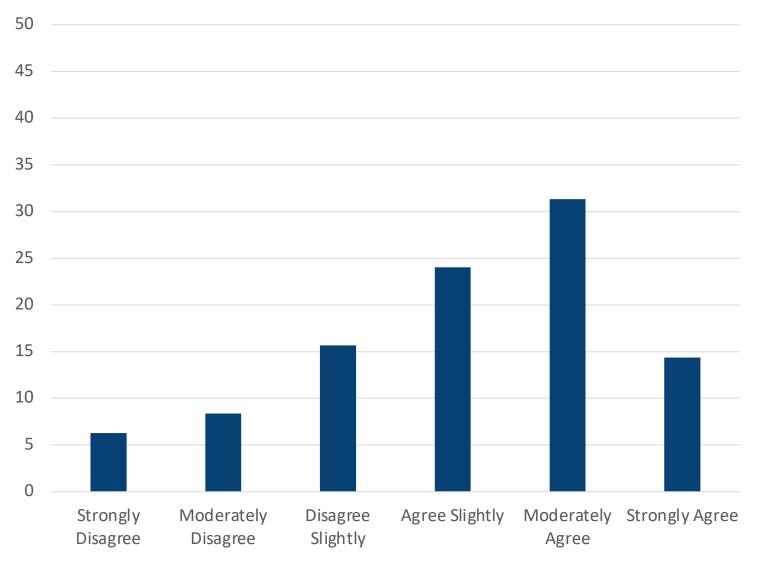


Is writing instruction (other than instruction in braille) part of your responsibilities as a TSVI?



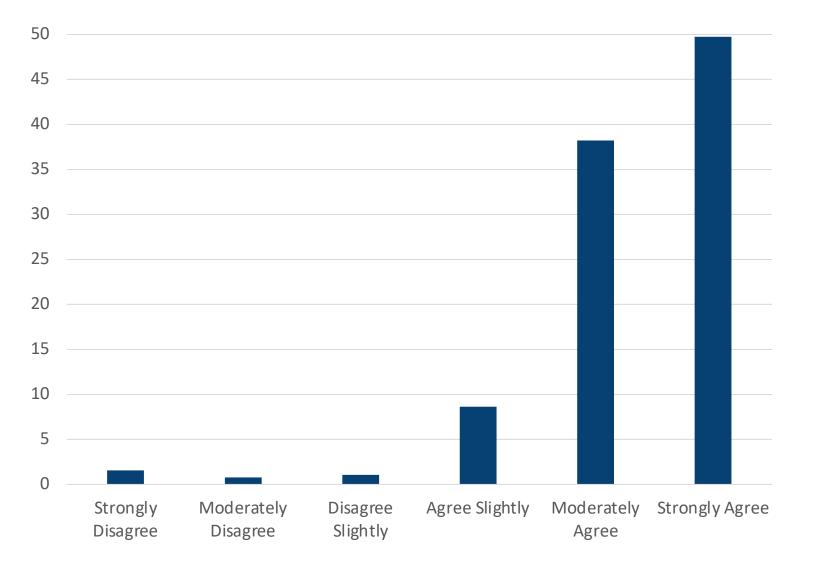


I have the resources I need to incorporate writing with my students.



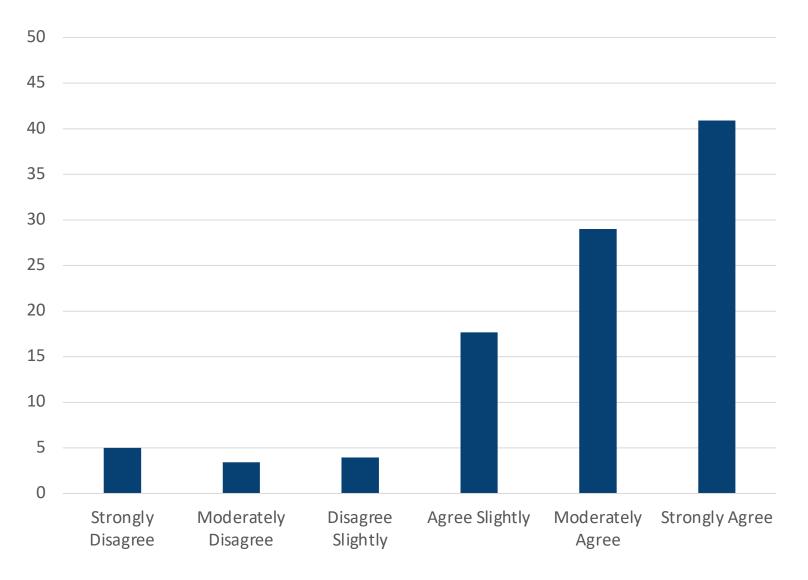


Writing is an effective learning tool for learning classroom material.





I collaborate with the classroom teacher to make writing accommodations.

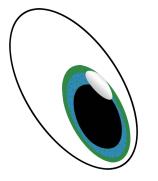


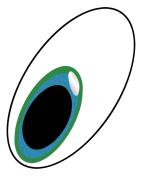


Research Question 3: Writing Modes & Practices Used

- TSVIs chose writing activities from a list of activities/modes & added any additional activities/modes
- Activities fell into 3 categories:
 - Writing skills
 - Functional writing
 - Higher level writing

• Let's take a look at what we found!









Examining the Data

• Let's take a look at the data together:

	Blindness	Low Vision	Deafblind	MD (not DB)
	%	%	%	%
Spelling	63	59	22	28

- What do you notice?
- Why do you think some are lower or higher?
- Is this surprising, appropriate?
- What ideas or strategies do you have to share?



Turn & Talk



- What do you notice?
- Why do you think some are lower or higher?
- Is this surprising, appropriate?
- What ideas or strategies do you have to share?





Functional Writing Activities

	Blindness	Low Vision	Deafblind	MD (not DB)
	%	%	%	%
Taking notes while listening	47	50	12	13
Writing answers to questions	80	75	30	37
Labeling	53	43	18	26
Writing questions	52	49	13	16
Writing lists	62	59	24	28
Completing worksheets	72	70	27	35



Research Question 4: Do TSVIs beliefs/experiences predict the proportion of writing practices used?

- Remember these:
 - Beliefs about responsibility for teaching writing
 - Beliefs about value of teaching writing
 - Self-efficacy for teaching writing
 - Collaboration to teach writing



Correlations Among Predictors

	1	2	3	4	5	6
1. Years as TVI	1.00					
2. Formal/informal preparation	0.03	1.00				
3. Beliefs about responsibility for teaching writing	-0.09	0.32*	1.00			
4. Beliefs about value of teaching writing	0.12*	0.09	0.08	1.00		
5. Self-efficacy for teaching writing	0.13*	0.42*	0.35*	0.34*	1.00	
6. Writing collaboration with classroom teacher	0.16*	0.37*	0.38*	0.36*	0.72*	1.00
Note. N = 381. *p < .05						



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5. Self-efficacy for teaching writing	0.13*	0.42*	0.35*	0.34*	1.00	
6. Writing collaboration with classroom teacher	0.16*	0.37*	0.38*	0.36*	0.72*	1.00
Note. N = 381. *p < .05						



Variables Predicting TSVI use of Functional Writing with students													
	Blind			Lo	Low Vision			Deafblind			MD (not DB)		
	OR	р	Sig.*	OR	р	Sig.*	OR	р	Sig.*	OR	р	Sig.*	
Years as TSVI	1.01	.305	N	1.01	.433	N	1.00	.982	N	1.00	.957	N	
Preparation	1.02	.796	N	1.18	.038	N	1.24	.207	N	1.24	.087	N	
Beliefs: responsibility	1.17	.006	Y	1.11	.035	Y	1.05	.660	N	1.26	.003	Y	
for teaching writing													
Beliefs: value of	1.11	.297	N	1.03	.741	N	1.09	.604	N	1.30	.029	N	
teaching writing								'			'		
Teaching writing self-	1.38	.001	Y	1.18	.047	Y	1.56	.018	Y	1.36	.020	Y	
efficacy													
Writing collaboration	1.43	< .001	Y	1.22	.021	Y	1.24	.245	N	1.49	.004	Y	
with classroom teacher													



Discussion



Implications of TSVIs Beliefs and Expectations about Teaching Writing

- Considerable disagreement about responsibility for teaching writing
- They teach writing to some students more than others
 - Sometimes there are appropriate justifications:
 - Handwriting taught to LV students more than blind students
 - Taking notes while listening very low for DB students
 - Sometimes justifications are unclear:
 - Some writing practices used more with blind students than low vision students
 - Substantially less writing for students with DB or MD



Implications of TSVIs Beliefs and Expectations about Teaching Writing

- The amount of functional writing activities used with specific groups of students was significantly predicted by TSVIs:
 - beliefs about whether writing is their responsibility,
 - self-efficacy for teaching writing, and
 - collaboration with the classroom teacher.
- Years as a TSVI, preparation, and value for writing were not predictors



Identify and Discuss Ways to Improve Writing Instruction for Students with VI

- We need to find ways to:
 - identify whether writing should be the TSVI's responsibility
 - improve TSVI's self-efficacy
- Explore ways to increase the amount of writing for students with deafblindness or multiple disabilities



Thank you!



Research Question 4: Do TSVIs beliefs/experiences predict the proportion of writing practices used?

Variables Predicting TVI use of Higher-Level Writing with students													
	Blind			L	Low Vision			Deaf-Blind			MD (not DB)		
	OR	р	Sig.*	OR	р	Sig.*	OR	р	Sig.*	OR	р	Sig.*	
Years as TVI	1.00	.701	N	1.00	.530	N	0.97	.063	N	1.00	.934	N	
Preparation	1.17	.088	N	1.27	.004	Υ	1.48	.021	N	1.43	.006	Υ	
Beliefs: responsibility	1.29	< .001	Υ	1.23	< .001	Υ	1.02	.845	N	1.36	< .001	Υ	
for teaching writing													
Beliefs: value of	1.22	.036	N	1.04	.622	N	1.22	.217	N	1.20	.118	N	
teaching writing													
Teaching writing self-	1.54	< .001	Υ	1.37	< .001	Υ	1.61	.008	Υ	1.55	.001	Υ	
efficacy													
Writing collaboration	1.53	< .001	Υ	1.34	.001	Υ	1.48	.031	Υ	1.74	< .001	Υ	
with classroom teacher													

RQ4:

Variables Predicting TVI use of Writing Skills with students												
	Blind			Low Vision			Deaf-Blind			MD (not DB)		
	OR	р	Sig.*	OR	р	Sig.*	OR	р	Sig.*	OR	р	Sig.*
Years as TVI	1.00	.876	N	1.01	.185	N	0.97	.052	N	1.01	.320	N
Preparation	1.00	.990	N	1.09	.244	N	1.29	.126	N	1.14	.298	N
Beliefs: responsibility	1.20	.001	Y	1.19	.001	Y	1.02	.849	N	1.24	.008	Y
for teaching writing											_	
Beliefs: value of	1.02	.785	N	1.02	.764	N	1.15	.361	N	1.10	.407	N
teaching writing		'						'			•	
Teaching writing self-	1.29	.006	Y	1.17	.048	Y	1.39	.055	N	1.34	.025	Y
efficacy												
Writing collaboration	1.33	.003	Y	1.25	.007	Y	1.49	.027	Y	1.47	.005	Y
with classroom teacher												

