

APPENDIXES



Limited certificated teachers in Washington: Barriers to becoming fully certificated and needed supports

Appendix A. Methods

Appendix B. The Limited Certificated Teacher Survey

Appendix C. Supporting analyses

See https://go.usa.gov/xpXZD for the full report.

Appendix A. Methods

The study findings are based on analysis of responses to the Limited Certificated Teacher Survey administered in 2017 by the State of Washington Professional Educator Standards Board (see appendix B for the text of the survey). The study team analyzed survey responses using descriptive statistics, calculating the percentage of respondents who answered each item. The study team also analyzed responses by race/ethnicity (teachers of color and White teachers), and differences of at least 5 percentage points between groups were classified as meaningful.

To answer research question 1 on the percentage of limited certificated teachers in Washington who are interested in becoming fully certificated, the study team summarized responses to item 24 in section IV, "If you had all the support you needed to become a certificated teacher, would you be interested in pursuing full certification?" The study team also analyzed responses by race/ethnicity (teachers of color¹ and White teachers).

To answer research question 2 on the subject areas and grade levels that limited certificated teachers who express interest in becoming fully certificated want to teach, the study team analyzed responses to items related to respondents' desires to teach particular subject areas and grade levels. Results were compared for teachers of color and White teachers.

To answer research question 3 on the barriers to becoming fully certificated that limited certificated teachers who express interest in doing so perceive, the study team examined responses to items asking about barriers to becoming certificated and reported the percentage of respondents who rated each barrier "a moderate barrier" or "a large barrier." The study team also analyzed responses by race/ethnicity (teachers of color and White teachers).

To answer research question 4 on the supports that limited certificated teachers who express interest in becoming fully certificated report needing to pursue full certification, the study team reported the percentage of respondents who rated each support "important" or "very important." The analysis also compared responses of teachers of color and White teachers.

¹ Teacher of color is defined as a teacher who identifies as American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, or as two or more races/ethnicities.

The study team also examined whether the study sample is representative of the population of limited certificated teachers in Washington in terms of district locale. This analysis was based on each district's publicly available locale code from the National Center for Education Statistics Common Core of Data (Geverdt, 2015). Limited certificated teachers in urban and suburban schools are overrepresented, and limited certificated teachers in town and rural schools are underrepresented (table A1). Therefore, the findings should be interpreted with caution, as they are not representative of all limited certificated teachers in the state.

Table A1. Distribution of limited certificated teachers in the study sample and all limited certificated teachers in Washington, by locale, 2017 (percent)

	Study	All limited certificated teachers in
Locale	sample	Washington
Urban	35	22
Suburban	40	36
Town	14	28
Rural	12	14
Total	100	100

Note: Percentages may not sum to 100 because of rounding.

Source: Authors' analysis of responses to item 10 in section I of the Limited Certificated Teacher Survey administered in 2017 by the State of Washington Professional Educator Standards Board and 2015/16 data from U.S. Department of Education (n.d.).

References

Geverdt, D. (2015). Education demographics and geographic estimates program (EDGE): Locale boundaries user's manual (NCES No. 2016-012). National Center for Education Statistics Working Paper. Washington, DC: U.S. Department of Education. Retrieved July 17, 2017, from http://nces.ed.gov/pubsearch.

U.S. Department of Education, National Center for Education Statistics. (n.d.). Common Core of Data. Public School District Data, 2015–2016. Retrieved April 3, 2018, from https://nces.ed.gov/ccd/districtsearch/.

Appendix B. The Limited Certificated Teacher Survey

Introduction

Dear Limited Certificated Teacher,

We invite you to complete this voluntary online survey. This survey will inform K–12 and higher education leaders as they determine policies regarding alternative certification pathways for limited certificated teachers and paraprofessionals who wish to become fully certificated.

The Professional Educator Standards Board (PESB) is conducting this survey of all current limited certificated teachers in Washington. The purpose of this survey is to understand the level of interest individuals have in becoming certificated teachers, the barriers that exist in becoming certificated, and the supports that individuals may need to become certificated.

Depending on your past experience and your level of interest in becoming a certificated teacher, the survey should take 10–20 minutes. Although we hope all limited certificated teachers in Washington complete the survey, you are not required to participate. There are no consequences or risks if you stop participating in the survey or skip any questions. Participating in the survey benefits schools in Washington and individuals who would like to become certificated teachers by providing information that could lead to a larger pool of candidates.

Your responses will be kept confidential and will not be shared with anyone except PESB and REL Northwest researchers who analyze responses. To ensure that no one can identify your responses, we will not use your personal information in any reports. Your feedback is valuable and is appreciated.

If you have any questions, you may contact [name] at [email] or [phone].
Do you agree to take this voluntary survey?
□ Yes □ No
Are you a fully certificated teacher in Washington, (that is, do you hold a residency, continuing, or professiona teacher certificate)?
□ Yes □ No
[Logic: If a participant chooses "yes," end the survey.]
[Logic: If a participant chooses "no," continue the survey.]

I. Demographic information

- 1. What is your race/ethnicity? (Select one that describes the race/ethnicity category with which you primarily identify.) (Select all that apply.)
 - 1) American Indian or Alaska Native: a person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment.
 - 2) Asian: a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.
 - 3) Black or African American: a person having origins in any of the black racial groups of Africa.
 - 4) Hispanic or Latino: a person of Central American, Chicano, Cuban, Mexican, Puerto Rican, South American, or other Spanish culture or origin, regardless of race.
 - 5) Native Hawaiian or Other Pacific Islander: a person having origins in any of the original peoples of Guam, Hawaii, Samoa, or other Pacific Islands.
 - 6) White: a person having origins in any of the original peoples of Europe, the Middle East, or North Africa.
 - 7) Two or More Races: a person who primarily identifies with two or more of the above race/ethnicity categories.
 - 8) Other, please indicate:

2. W	hat	is	your	gend	ler?
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- 1) Female
- 2) Male

What is your birth ye

19__

- 4. Are you on the salary schedule?
 - 1) Yes
 - 2) No
 - 3) Not sure
- 5. During the current school year, what is your teaching salary for the entire school year?

\$_____ (For the entire school year)

- 6. What is the highest level of school you have attended or degree you have received?
 - 1) Some grade school or some high school only
 - 2) High school degree or equivalent (e.g., GED diploma)
 - 3) Some associate degree courses, but no degree
 - 4) Associate degree (usually two years)
 - 5) Some bachelor's degree courses, but no degree
 - 6) Bachelor's degree (usually four years)
 - 7) Master's/graduate-level degree (usually two years)
 - 8) Doctorate degree

[Logic: If a participant chooses 3 or lower, skip to the "General Information" section.]

[Logic: If a participant chooses 4 or higher, continue the survey.]

	is degree awarded by a university's department or colleducation?	ege of education or a college's department or
•	Yes No	
8. Did you	complete any of your college or university education in	another country?
1)	Yes	
•	No	
9. What w	as your major field of study in your college or university	?
1)	Agriculture education	21) Middle-level math
2)		22) Middle-level science
3)	-	23) Music: Choral
4)	Business and marketing education	24) Music: General (neither choral nor
5)	Chemistry	instrumental)
6)	Counseling and guidance	25) Music: Instrumental
7)	Dance	26) Physics
8)	Earth and space science	27) Reading
9)	Early childhood education	28) Science
10)) Early childhood special education	29) Secondary education
11	.) Educational psychology	30) Social studies
12	2) Elementary education	31) Special education
13	3) English language arts	32) Technology education
14	l) English language learners	33) Theatre arts
15	i) Family consumer special education	34) Traffic safety education
16	S) Health/fitness	35) Visual arts
17	') History	36) World languages
18	B) Library media	37) World languages – Latin
) Mathematics	Other, please explain:
20)) Middle-level humanities	
II. Gener	al information	
10. What	s the name of your primary district? [Dropdown name o	f districts]
11. Do you	u work for any other district(s)?	
1)	Yes	
2)	No	
12. How n	nany school(s) do you work for?	
	_Number of schools	
13. If you	work as a substitute teacher, how would you classify you	ur position?
1)	Long-term substitute (more than 30 days in one assign	nment)
2)		•
3)		<i>,</i>

teacher?	
• Re	port hours to the nearest whole hour. Do not record fractions of an hour or minutes.
	_Hours per week
	None (I did not work as a limited certificated teacher in the 2016/17 school year)
15. What t	ype of limited teaching certificate do you have from Washington state?
2) 3) 4)	Conditional teacher certificate Emergency teacher certificate Emergency substitute Not applicable: I do not have a limited teaching certificate from Washington state. Other, please explain:
16. Do you	have any type of teaching certification from another state in the United States?
•	Yes No
17. Do you	have any type of teaching certification from another country?
1)	Yes
2)	No
18. How w	ould you describe your current assignment as a limited certificated teacher? (Select all that apply.)
1)	Teacher of a general education classroom
2)	Teacher of a bilingual education classroom
3)	Teacher of a dual-language classroom
4)	Teacher of a special education classroom
5)	Teacher of a career and technical education (CTE) classroom
6)	I'm not sure
7)	Other, please explain:
19. With w	hat grade level(s) do you currently work as a limited certificated teacher? (Select all that apply.)
1)	Prekindergarten
2)	Elementary (kindergarten–grade 5)
3)	Middle school (grades 6–8)
4)	High school (grades 9–12)

14. During the 2016/17 school year, approximately how many hours have you worked as a limited certificated

20. How many years have you worked (received pay) in a K–12 education setting?

Role	In Washington	In states other than Washington	In another country
20-1. General education teacher (preschool through grade 12 in any subject area)			
20-2. Career and technical education (CTE) teacher			
20-3. Other			

III. Language

21. Do you speak a language other than English?

- 1) Yes
- 2) No

22. Which language(s) do you speak?	(Select all that apply.)	
☐ Akan	☐ Khmer	☐ Thai
☐ Amharic	☐ Kinyarwanda	☐ Tigrinya
☐ Arabic	☐ Kirundi	□ Toishanese
☐ Assamese	☐ Konkani	☐ Tongan
☐ Awadhi	☐ Korean	☐ Turkish
☐ Azerbaijani	☐ Kurdish	☐ Turkmen
☐ Balochi	☐ Laotian	☐ Ukrainian
☐ Belarusian	☐ Madurese	□ Urdu
☐ Bengali	☐ Magahi	□ Uyghur
☐ Bhojpuri	☐ Maithili	☐ Uzbek
☐ Burmese	□ Malagasy	☐ Vietnamese
☐ Cambodian	☐ Malay/Indonesian	☐ Wu (Shanghainese)
☐ Cebuano (Visayan)	□ Malayalam	☐ Xhosa
☐ Cham	☐ Mandarin	☐ Xiang (Hunnanese)
☐ Chewa	☐ Marathi	☐ Yoruba
☐ Chhattisgarhi	☐ Marwari	☐ Yue (Cantonese)
☐ Chittagonian	☐ Mien	☐ Zhuang
☐ Czech	☐ Mossi	☐ Zulu
☐ Deccan	☐ Nepali	☐ Other
☐ Dhundhari	☐ Northern Min	\square Other, please
☐ Dutch	☐ Odia (Oriya)	explain:
☐ Eastern Min	☐ Oromo	
☐ Farsi	☐ Pashto	
☐ Filipino	☐ Persian	
☐ French	☐ Polish	
☐ Fula	☐ Portuguese	
☐ Gan Chinese	☐ Punjabi	
☐ German	☐ Quechua —	
☐ Greek	☐ Romanian	
☐ Gujarati —	☐ Russian	
☐ Haitian Creole	☐ Samoan	
□ Hakka 	□ Saraiki —	
☐ Haryanvi —	☐ Serbo-Croatian	
☐ Hausa	☐ Shona	
☐ Hiligaynon	☐ Sindhi	
☐ Hindi	☐ Sinhalese	
☐ Hmong	□ Somali	
☐ Hungarian	☐ Southern Min	
□ Igbo	☐ Spanish	
□ Ilocano	☐ Sundanese	
□ Italian	☐ Swahili	
☐ Japanese	☐ Swedish	
☐ Javanese	☐ Sylheti	
☐ Jin	☐ Tagalog	
☐ Kannada	☐ Tamil	
☐ Kazakh	□ Telugu	

IV. Future plans

We would like to learn about your future plans to become a fully certificated teacher in general education teacher (K–12) or career and technical education (CTE) teacher.

- 23. To what extent do you feel satisfied working in your current role as a limited certificated teacher?
 - 1) Not at all satisfied
 - 2) Somewhat satisfied
 - 3) Satisfied
 - 4) Very satisfied
 - 5) No opinion
- 24. If you had all the support you needed to become a certificated teacher, would you be interested in pursuing full certification?
 - 1) Yes
 - 2) No
 - 3) Maybe
 - 4) I don't know

[Logic: If "yes," "maybe," or "I don't know," skip the next question and then continue.]

[Logic: If "no" to the above question, go to the next question and then skip to the section about "Education Credentials."]

- 25. Why are you NOT interested in becoming a fully certificated teacher? (Select all that apply.)
 - 1) I'm on a different career path
 - 2) I'm more interested in becoming an educational staff associate (for example, a school counselor, psychologist, social worker, nurse, physical therapist, occupational therapist, speech language pathologist, or audiologist)
 - 3) There are too many barriers to pursuing a teaching career
 - 4) Other, please explain:
- 26. What roles do you want to have as a fully certificated teacher?
 - 1) General education teacher (preschool through grade 12, any subject area)
 - 2) Career and technical education (CTE) teacher
 - 3) Not sure yet
 - 4) Other, please explain: ______
- 27. At what grade level(s) would you be interested in working? (Select all that apply.)
 - 1) Prekindergarten
 - 2) Elementary (kindergarten–grade 5)
 - 3) Middle school (grades 6–8)
 - 4) High school (grades 9–12)
 - 5) Not sure yet
 Other, please explain: ______

28. What subject area(s) would you be interested in teaching? (Select all that apply.)

- 1) Agriculture education
- 2) Bilingual education
- 3) Biology
- 4) Business and marketing education
- 5) Career and technical education
- 6) Chemistry
- 7) Computer science
- 8) Dance
- 9) Earth and space science
- 10) Early childhood education
- 11) Early childhood special education
- 12) Elementary education
- 13) Engineering
- 14) English language arts
- 15) English language learners
- 16) Family consumer science
- 17) Health/fitness
- 18) History

- 19) Library media
- 20) Mathematics
- 21) Music: Choral
- 22) Music: General (neither choral nor instrumental)
- 23) Music: Instrumental
- 24) Physics
- 25) Reading
- 26) Science
- 27) Social studies
- 28) Special education
- 29) Technology education
- 30) Theatre arts
- 31) Traffic safety education
- 32) Visual arts
- 33) World languages
- 34) World languages Latin
- 35) Other, please explain:

V. Education credentials

29. Did you take and pass any of the following tests used to measure skills and content knowledge related to reading, writing, and math? (Select all that apply.)

		California						
		Basic				National		
	Washington	Education		Washington	Educational	Evaluation		
	Educator	Skills Test		Educator Skills	Testing	Series [™] Early	Associate in	
	Skills Test-	(CBEST)	PRAXIS Core	Test-	Service	Childhood	Arts-Early	
	Basic	(California	Academic	Endorsements	ParaPro	Education	Childhood	
	(WEST-B)	and Oregon)	Skills	(WEST-E)	Assessment	(101)	Education	SAT or ACT
Yes, and passed								
Yes, and did not pass								
No, did not take								
Don't know								

VI. Participation in an alternative program

Alternative programs are designed for those changing careers and for individuals already working in the school system who want to become certificated to teach. Compared to traditional educator preparation programs, alternative routes tend to be shorter, more convenient, more affordable, more job embedded, and more practically oriented.

30. Are you currently participating in an alternative program?

- 1) Yes
- 2) No

[Logic: If a participant chooses "No," go to the next question]

[Logic: If a participant chooses "Yes," skip the next question and continue the survey]

- 31. Would you like to be in one?
 - 1) Yes
 - 2) No
 - 3) Not sure

[Logic: If a participant chooses "Yes," skip to the "What aspects of your alternative program appeal to you?" question]

[Logic: If a participant chooses "No" or "Not sure," skip to the "District/School Support and Barriers" section]

- 32. Which institution do you attend?
 - 1) Central Washington University
 - 2) Centralia College
 - 3) City University of Seattle
 - 4) Grays Harbor College
 - 5) Heritage University
 - 6) Northwest University
 - 7) Pacific Lutheran University
 - 8) Pierce College
 - 9) Saint Martin's University
 - 10) Seattle Pacific University
 - 11) University of Washington-Seattle
 - 12) Washington State University
 - 13) Western Washington University
 - 14) Other: _____

33. Which program do you participate in?

- 1) Alternative Certification Route at Seattle Pacific University
- 2) Alternative Pathways to Teaching (APT) Program at Central Washington University
- 3) Alternate Routes to Certification (ARC) Program at Pacific Lutheran University
- 4) Bachelor of Applied Science in Teaching (BAS-T) at Pierce College
- 5) Bachelor of Applied Science, Teacher Education at Centralia College
- 6) Bachelor of Applied Science, Teacher Education at Grays Harbor College
- 7) Future Bilingual Teacher Fellows (FBTF) Program at Western Washington University
- 8) Secondary Teachers Alternate Route (STAR) Program at Saint Martin's University
- 9) HU Accelerate Program at Heritage University
- 10) NU 'Grow-Your-Own' Alternative Routes Certification Program at Northwest University
- 11) Preparation for Teachers for Low-Incidence Disabilities at University of Washington-Seattle
- 12) Secondary Educators for Equity and Diversity (SEED) Program at Western Washington University
- 13) Southwest Washington Cooperative at City University of Seattle
- 14) Teacher Preparation Program at Washington State University
- 15) U-ACT Program at University of Washington-Seattle
- 16) City University Alternative Route (not Southwest WA Cooperative funded)
- 34. What aspects of alternative programs appeal to you?
 - 1) Receiving credit for prior learning
 - 2) Staying in my current job
 - 3) The geographic location of the program
 - 4) The hybrid class structure
 - 5) Having local mentors
 - 6) The short time period it takes to become certificated
 - 7) The cohort structure
 - 8) The collaboration with other teachers

Λ \	0+1	mlaasa sumla:	
91	orner.	please explai	n:

VII. District/school support and barriers

35. Are you aware of any programs or supports at the district or school level that are available for people who want to become a teacher or other certificated staff member (such as the Grow Your Own program)?

- 1) Yes
- 2) No

	e did you hear about alterna						
people who want to become a teacher or other certificated staff members? (Select all that apply.)							
1)	1) Principal at your school						
,	2) Principal at another school						
	B) Teacher(s) at your school						
•	4) Teacher(s) at another school						
-	5) District administrator(s)						
	6) Family						
7)	Friends Social media						
•	Website (that is, Office of	Superintenden	nt of Public Inst	ruction or Profe	essional Educate	or Standards	
5)	Board)	Superintenden	it of Fabric mist	raction of Front	essional Ludcatt	or Staridards	
10	O) Conferences						
	, L) Professional developmen	t					
	2) Other, please explain:						
13	3) Not applicable: I have not	heard about a	ny alternative p	rograms or sup	ports.		
1) 2)	that can help you access information and resources? 1) Yes 2) No 38. To what extent would you feel comfortable talking to the following people about becoming a fully certificated						
		Not at all	Somewhat		Very		
		comfortable		Comfortable	comfortable	No opinion	
38-1. Pri	ncipal at your school						
38-2. Pri	ncipal at another school						
38-3. Tea	acher(s) at your school						
38-4. Tea	acher(s) at another school						
38-5. Dis	trict administrator(s)						
38-6. Frie	ends who are not in the n field						
If	you have other opinions, pl	ease describe h	ere:				

39. On a scale of 1–4, with 1 being "Not at all important" and 4 being "Very important," how would you rate the importance of receiving the following supports, on your ability to become a fully certificated teacher?

	Not at all important	Somewhat important	Important	Very important	No opinion
39-1. Continued salary					
39-2. Job security through the internship					
39-3. Student teaching experience					
39-4. Medical benefits					
39-5. Scholarship					
39-6. Affordable tuition					
39-7. Financial aid					
39-8. Books and class materials supplied					
39-9. Testing fees paid					
39-10. Classes offered in the evening or on weekends					
39-11. Classes offered online					
39-12. Classes offered at a site close to your workplace or school district					
If you have other opinions, please d	escribe here: _				

barriers to becoming a fully certificated teacher? A small A moderate A large barrier barrier barrier barrier No opinion 40-1. I don't feel confident in my ability to pass the entrance and/or subject area exam(s). 40-2. I can't afford to go back to school. 40-3. I don't know how to get my transcripts evaluated. 40-4. I don't understand the certification process. 40-5. I need to continue working to support my family. 40-6. I would need additional support in order to have time for classes. 40-7. I don't feel confident with my English skills. 40-8. I feel there are cultural barriers to my becoming a teacher or district certificated staff member. If you have other opinions, please describe here: VIII. School climate We want to learn more about the working conditions at your school(s) and your interactions with colleagues. 41. To what extent do you agree with the following statements? Strongly Strongly disagree Disagree Agree agree 41-1. Teachers in this school trust each other. 41-2. At this school, it's OK to discuss feelings, worries, and frustrations with other teachers. 41-3. Teachers respect their colleagues who take the lead in school improvement efforts. 41-4. Teachers at this school respect the expertise of their colleagues. 41-5. Teachers at this school like being here. I would describe us as a satisfied group.

40. On a scale of 1–4, with 1 being "Not a barrier" and 4 being "A large barrier," how would you rate the following

	Strongly disagree	Disagree	Agree	Strongly agree
41-6. Teachers at this school really care about one another.				
41-7. I feel respected by my fellow teachers.				
41-8. Working conditions in this school make me want to become a fully certificated teacher.				
41-9. At this school, it's OK to discuss feelings, worries, and frustrations with the principal.				
41-10. The principal looks out for the personal welfare of the faculty members.				
41-11. I trust the principal and feel I can take them at their word.				
41-12. The principal at this school is an effective manager who keeps the school running smoothly.				
41-13. The principal takes a personal interest in the professional development of teachers.				
41-14. I feel respected by my principal.				
41-15. The principal has encouraged me to become a fully certificated teacher.				
41-16. I feel that my colleagues encourage me to become fully certificated.				
41-17. I feel that the principal encourages me to become fully certificated.				
41-18. I feel that district administrators encourage me to become fully certificated.				
41-19. I am aware of teachers in this district who have used alternative routes to become fully certificated.				

Thank you for your participation!

Appendix C. Supporting analyses

This appendix provides additional information about the characteristics of limited certificated teachers responding to the survey and what they consider barriers to and supports for becoming fully certificated.

Table C1. Characteristics of limited certificated teachers who expressed interest in becoming fully certificated and all limited certificated teachers who responded to the survey

Characteristic Number Percent Number Percent Demographic characteristics Percent Percent Gender 184 25 258 24 Female 542 74 800 75 Total 726 100 1,058 100 Roce/ethnicity White 546 76 817 77 People of color 177 24 238 23 American Indian 9 1 11 1 1 Asian 27 4 38 4 Black 25 3 33 3 Hispanic 74 10 90 9 Native Hawaiian 2 0 2 0 Two or more races/ethnicities 37 5 56 5 Others 37 5 56 5 19 to <30 95 13 123 12 20 to <40 95 13		Limited certific					
Characteristic Number Percent Number Percent Demographic characteristics Female 184 25 258 24 Female 542 74 800 75 Total 726 100 1,058 100 Race/ethnicity 817 77 People of color 177 24 238 23 American Indian 9 1 11 1 Asian 27 4 38 4 Black 25 3 33 3 Hispanic 74 10 90 9 Native Hawalian 2 0 2 0 Two or more races/ethnicities 37 5 56 5 Others 3 0 8 1 Total 76 25 21 20 40 25 3 3 3 1 50 to 45 3 0 8				All limited certificated teachers who			
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White 546 76 817 77 People of color 177 24 238 23 American Indian 9 1 11 1 Asian 27 4 38 4 Black 25 3 33 3 Hispanic 74 10 90 9 Native Hawaiian 2 0 2 0 Two or more races/ethnicities 37 5 56 5 Others 3 0 8 1 Total 723 100 1,055 100 Age 1 1 25 212 20 Age 1 1 25 12 20 Age 1 1 25 212 20 Age 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Total	726	100	1,058	100		
People of color 177 24 238 23 American Indian 9 1 11 1 Asian 27 4 38 4 Black 25 3 33 3 Hispanic 74 10 90 9 Native Hawaiian 2 0 2 0 Two or more races/ethnicities 37 5 56 5 Others 3 0 8 1 Total 723 100 1,055 100 Age 19 13 123 12 20 Age 19 13 123 12 20 10 2 20 10	Race/ethnicity						
American Indian 9 1 11 1 Asian 27 4 38 4 Black 25 3 33 3 Hispanic 74 10 90 9 Native Hawaiian 2 0 2 0 Two or more races/ethnicities 37 5 56 5 Others 3 0 8 1 Total 723 100 1,055 100 Age 1 1 2 2 2 1 2 1 0 1	White	546	76	817	77		
Asian 27 4 38 4 Black 25 3 33 3 Hispanic 74 10 90 9 Native Hawaiian 2 0 2 0 Two or more races/ethnicities 37 5 56 5 Others 3 0 8 1 Total 723 100 1,055 100 Age 1 <t< td=""><td>People of color</td><td>177</td><td>24</td><td>238</td><td>23</td></t<>	People of color	177	24	238	23		
Black 25 3 33 3 Hispanic 74 10 90 9 Native Hawaiian 2 0 2 0 Two or more races/ethnicities 37 5 56 5 Others 3 0 8 1 Total 723 100 1,055 100 Age ***********************************	American Indian	9	1	11	1		
Hispanic 74 10 90 9 Native Hawaiian 2 0 2 0 Two or more races/ethnicities 37 5 56 5 Others 3 0 8 1 Total 723 100 1,055 100 Age 19 13 123 12 30 to <40	Asian	27	4	38	4		
Native Hawaiian 2 0 2 0 Two or more races/ethnicities 37 5 56 5 Others 3 0 8 1 Total 723 100 1,055 100 Age ***********************************	Black	25	3	33	3		
Two or more races/ethnicities 37 5 56 5 Others 3 0 8 1 Total 723 100 1,055 100 Age ***********************************	Hispanic	74	10	90	9		
Others 3 0 8 1 Total 723 100 1,055 100 Age 19 to <30	Native Hawaiian	2	0	2	0		
Total 723 100 1,055 100 Age 19 to <30 95 13 123 12 30 to <40 176 25 212 20 40 to <50 251 35 324 31 50 to <60 134 19 230 22 60 or older 59 8 161 15 Total 715 100 1,050 100 Professional characteristics Salary Less than \$20,000 245 48 395 54 \$20,000 to $<$30,000$ 74 14 109 15 \$30,000 to $<$40,000$ 88 17 96 13 \$40,000 to $<$50,000$ 63 12 66 9 \$50,000 to $<$60,000$ 32 6 38 5 \$60,000 to $<$70,000$ 8 2 16 2 \$70,000 or more 2 0 5 1	Two or more races/ethnicities	37	5	56	5		
Age 19 to <30	Others	3	0	8	1		
19 to <30	Total	723	100	1,055	100		
30 to <40 176 25 212 20 40 to <50	Age						
40 to <50 251 35 324 31 50 to <60	19 to <30	95	13	123	12		
50 to <60 134 19 230 22 60 or older 59 8 161 15 Total 715 100 1,050 100 Professional characteristics Salary Less than \$20,000 245 48 395 54 \$20,000 to <\$30,000	30 to <40	176	25	212	20		
60 or older 59 8 161 15 Total 715 100 1,050 100 Professional characteristics Salary Less than \$20,000 245 48 395 54 \$20,000 to <\$30,000	40 to <50	251	35	324	31		
Total 715 100 1,050 100 Professional characteristics Salary Less than \$20,000 245 48 395 54 \$20,000 to <\$30,000	50 to <60	134	19	230	22		
Professional characteristics Salary Less than \$20,000 245 48 395 54 \$20,000 to <\$30,000	60 or older	59	8	161	15		
Salary Less than \$20,000 245 48 395 54 \$20,000 to <\$30,000	Total	715	100	1,050	100		
Less than \$20,000 245 48 395 54 \$20,000 to <\$30,000	Professional characteristics	·		•			
\$20,000 to <\$30,000	Salary						
\$30,000 to <\$40,000	Less than \$20,000	245	48	395	54		
\$30,000 to <\$40,000	\$20,000 to <\$30,000	74	14	109	15		
\$40,000 to <\$50,000	\$30,000 to <\$40,000	88	17	96	13		
\$60,000 to <\$70,000		63	12	66	9		
\$60,000 to <\$70,000	\$50,000 to <\$60,000	32	6	38	5		
\$70,000 or more 2 0 5 1					2		
1001 712 100 723 100	Total	512	100	725	100		

	who express	Limited certificated teachers who expressed interest in becoming fully certificated		All limited certificated teachers who responded to the survey	
Characteristic			Number	Percent	
Years of experience					
Less than 3	296	41	410	38	
3 to <6	179	25	253	24	
6 to <12	134	18	177	17	
12 to <20	65	9	109	10	
20 or more	55	8	121	11	
Total	729	100	1,070	100	
Education level					
Below associate's	30	4	68	6	
Associate's	63	9	93	9	
Bachelor's	429	59	621	58	
Master's or above	206	28	286	27	
Total	728	100	1,068	100	
Grade ^a					
Prekindergarten	75	10	117	11	
Elementary	442	61	661	62	
Middle	316	43	485	45	
High	390	54	566	53	
Current assignment ^a					
General education	422	58	649	60	
Bilingual	56	8	65	6	
Dual	44	6	59	6	
Special education	189	26	271	25	
Career and technical education	95	13	135	13	
School characteristic					
Locale ^b					
Urban	250	35	363	35	
Suburban	295	41	419	40	
Town	101	14	148	14	
Rural	71	10	121	12	
Total	717	100	1,051	100	

Note: Because of survey nonresponse, the total number of responses for each characteristic may not sum to 729 for limited certificated teachers who expressed interest in becoming fully certificated or to 1,073 for all limited certificated teachers who responded to the survey.

Percentages may not sum to 100 because of rounding.

Source: Authors' analysis of responses to items 1, 2, 3, 5, 6, 10, 18, 19, and 20 in section I and item 24 in section IV of the Limited Certificated Teacher Survey administered in 2017 by the State of Washington Professional Educator Standards Board and locale data from U.S. Department of Education (n.d.).

a. Respondents could choose more than one answer, so the total number of responses in this category exceeds the total number of respondents.

b. The study team collapsed the 12 locale codes into four categories: urban (codes 11–13), suburban (codes 21–23), town (codes 31–33), and rural (codes 41–43).

Table C2. Barriers to becoming identified by fully certificated that limited certificated teachers who expressed interest in doing so

Barrier	Rating	Number	Percent
I don't feel confident in my ability to pass the entrance and/or	Moderate	109	15
subject area exam(s). $(n = 706)$	Large	48	7
I can't afford to go back to school. (n = 711)	Moderate	204	29
	Large	262	37
I don't know how to get my transcripts evaluated. (n = 707)	Moderate	75	11
	Large	16	2
I don't understand the certification process (n = 709)	Moderate	160	23
	Large	56	8
I need to continue working to support my family. (n = 711)	Moderate	151	21
	Large	347	49
I would need additional support in order to have time for classes.	Moderate	203	29
(n = 709)	Large	157	22
I don't feel confident with my English skills. (n = 709)	Moderate	15	2
	Large	11	2
I feel there are cultural barriers to my becoming a teacher or district	Moderate	21	3
certificated staff member. $(n = 710)$	Large	17	2

Source: Authors' analysis of responses to item 24 in section IV and items 40-1 to 40-8 in section VII of the Limited Certificated Teacher Survey administered in 2017 by the State of Washington Professional Educator Standards Board.

Table C3. Barriers to becoming fully certificated identified by limited certificated teachers who expressed interest in doing, by teacher race/ethnicity

		Limited certificated teachers who expressed interest in becoming fully certificated (percent)		
Barrier	Rating	White teachers (n = 546)	Teachers of color (n = 177)	Difference ^a (percentage points)
I don't feel confident in my ability to pass the entrance	Moderate	12	26	
and/or subject area exam(s). (n = 706)	Large	5	14	
	Total	17	40	-23†
I can't afford to go back to school. (n = 711)	Moderate	30	27	
, ,	Large	34	43	
	Total	64	70	-6 †
I don't know how to get my transcripts evaluated. ($n = 707$)	Moderate	10	11	
	Large	2	2	
	Total	12	13	-1
I don't understand the certification process (n = 709)	Moderate	21	29	
	Large	8	8	
	Total	29	37	-8†
I need to continue working to support my family. $(n = 711)$	Moderate	21	23	
	Large	47	53	
	Total	68	76	- 8†
I would need additional support in order to have time for	Moderate	28	30	
classes. (n = 709)	Large	20	26	
	Total	48	56	- 8†
I don't feel confident with my English skills. (n = 709)	Moderate	1	5	
	Large	0	5	
	Total	1	10	_9 †
I feel there are cultural barriers to my becoming a teacher	Moderate	1	8	
or district certificated staff member. ($n = 710$)	Large	1	6	
	Total	2	14	-12†

[†] indicates that the difference between limited certificated teachers of color and White limited certificated teachers was at least 5 percentage points. a. A negative value indicates a higher percentage of teachers of color than of White teachers.

Source: Authors' analysis of responses to item 1 in section I, item 24 in section IV, and items 40-1 to 40-8 in section VII of the Limited Certificated Teacher Survey administered in 2017 by the State of Washington Professional Educator Standards Board.

Table C4. Supports that limited certificated teachers who expressed interest in becoming fully certificated report needing to pursue full certification

Support	Rating	Number	Percent
Continued salary	Important	133	19
	Very important	529	4
Job security through the internship	Important	146	21
	Very important	472	67
Student teaching experience	Important	169	24
	Very important	364	51
Medical benefits	Important	134	19
	Very important	434	62
Scholarship	Important	145	21
	Very important	452	64
Affordable tuition	Important	104	15
	Very important	565	80
Financial aid	Important	129	18
	Very important	462	66
Books and class materials supplied	Important	174	25
	Very important	383	54
Testing fees paid	Important	157	22
	Very important	407	58
Classes offered in the evening or on weekends	Important	162	23
	Very important	429	61
Classes offered online	Important	98	14
	Very important	546	77
Classes offered at a site close to your workplace or school district	Important	155	22
	Very important	470	67

Source: Authors' analysis of responses to item 24 in section IV and items 39-1 to 39-12 in section VII of the Limited Certificated Teacher Survey administered in 2017 by the State of Washington Professional Educator Standards Board.

Table C5. Supports that limited certificated teachers who expressed interest in becoming fully certificated

report needing to pursue full certification, by race/ethnicity

	becoming ful	Limited certificated teachers who expressed interest in becoming fully certificated (percent)		
	White	Teachers	Difference ^a	
	teachers	of color	(percentage	
Perceived supports Rating	(n = 546)	(n = 177)	points)	
Continued salary Important	20	13		
Very important	72	80		
Total	92	93	-1	
ob security through the internship Important	22	19		
Very important	64	75		
Total	86	94	- 8†	
Student teaching experience Important	25	21		
Very important	48	60		
Total	73	81	_8 †	
Medical benefits Important	20	17		
Very important	58	72		
Total	78	89	-11†	
Scholarship Important	21	18		
Very important	61	72		
Total	82	90	-8†	
Affordable tuition Important	16	13		
Very important	80	81		
Total	96	94	2	
inancial aid Important	20	14		
Very important	63	73		
Total	83	87	-4	
Books and class materials supplied Important	27	19	·	
Very important	50	66		
Total	77	85	-8 †	
esting fees paid Important	23	19		
Very important	53	70		
Total	76	89	-13†	
Classes offered in the evening or on Important	26	15	13.	
- de de	57	74		
very important			_6†	
Total Classes offered online Important	83	89	-01	
'	14	15		
Very important	77	76		
Total	91	91	0	
Classes offered at a site close to your Important	24	17		
vorkplace or school district Very important	64	76		
Total	88	93	- 5†	

[†] indicates that the difference between limited certificated teachers of color and White limited certificated teachers was at least 5 percentage points. a. A negative value indicates a higher percentage of teachers of color than of White teachers.

Source: Authors' analysis of responses to item 1 in section I, item 24 in section IV, and items 39-12 in section VII of the Limited Certificated Teacher Survey administered in 2017 by the State of Washington Professional Educator Standards Board.