

Student Sense of Belonging in Schools: Connection to Outcomes

Caring about Students is Foundational to Belonging and Academic Excellence

This brief examines how students' sense of belonging in schools correlates with attendance and 9th grade on-track outcome measures, using data from the seven sense of belonging (comfortable at school) items administered to students in grades 3-11, in 2021-22, as part of the [Student Educational Equity Development \(SEED\) Survey](#).

The SEED survey's focus on student experience and sense of belonging within the school community offers insight into the barriers students experience in their engagement with school. This brief contributes to the body of scholarship demonstrating that sense of belonging and engagement are foundational for regular attendance and credit attainment,¹ a key focus of the [Every Day Matters initiative](#) with a specific focus on the relational conditions that support belonging, connectedness and engagement. Regular attendance is strongly [connected to student achievement](#), and, along with credit attainment, [is a strong predictor of a student's likelihood of on-time graduation](#). Addressing the root causes of absenteeism at a systems level requires strong partnerships between students, families, schools, and communities.

Learning directly from students about their educational experiences can and should inform local education investments. The initiatives contained within the [Integrated Guidance](#) require schools to engage their students, families, staff, and communities to elevate strengths, needs and priorities. The SEED Survey enables ODE to leverage direct student responses to more closely examine how their sense of belonging predicts their academic outcomes.

Key Takeaways

With quick links to the relevant section

- There is a [strong positive relationship between sense of belonging and attendance rates](#) across grade levels, with four indicators showing particularly strong association: "I feel welcome at school", "I have friends at school", "I like going to school", and "There are adults at my school who care about me."
- A similar relationship exists with [ninth grade on-track rates](#), with the same four indicators again showing stronger associations.
- Having a [caring adult](#) at school is a strong [protective factor](#) for both attendance and credit attainment, even when other sense of belonging indicators are absent.
- There are students with a [strong negative response](#) to questions about sense of belonging, and these students have substantially lower rates of credit attainment and regular attendance. For some indicators and grades, [more than half](#) of these students are chronically absent. This population is exceptionally likely to need additional supports to connect with their school community and earn the credits needed to graduate.

On average, 16,000 students responded to the sense of belonging questions, though the total number of responses varies by question. Students taking SEED may skip any or all questions they are not comfortable answering, for any reason.

¹ Korpershoek, Hanke, Esther Tamara Canrinus, Marjon Fokkens-Bruinsma, and Hester de Boer. "The relationships between school belonging and students' motivational, social-emotional, behavioural, and academic outcomes in secondary education: A meta-analytic review." *Research Papers in Education* 35, no. 6 (2020): 641-680.



For additional information about the SEED survey, the sense of belonging items, participation rates, and demographic factors related to student sense of belonging, please see the previous brief: [Student Sense of Belonging in Schools: Predictive Factors](#).^{2,3} That brief also includes recommendations, resources, and best practices to support student sense of belonging and engagement.

Regular Attendance

Students who agreed or strongly agreed with sense of belonging items were consistently more likely to be regular attenders⁴ than those who disagreed or strongly disagreed. The effect was present across all seven items, but the magnitude of the effect was greatest among measures of comfort and feeling cared for within the school community, shown in the graph below.

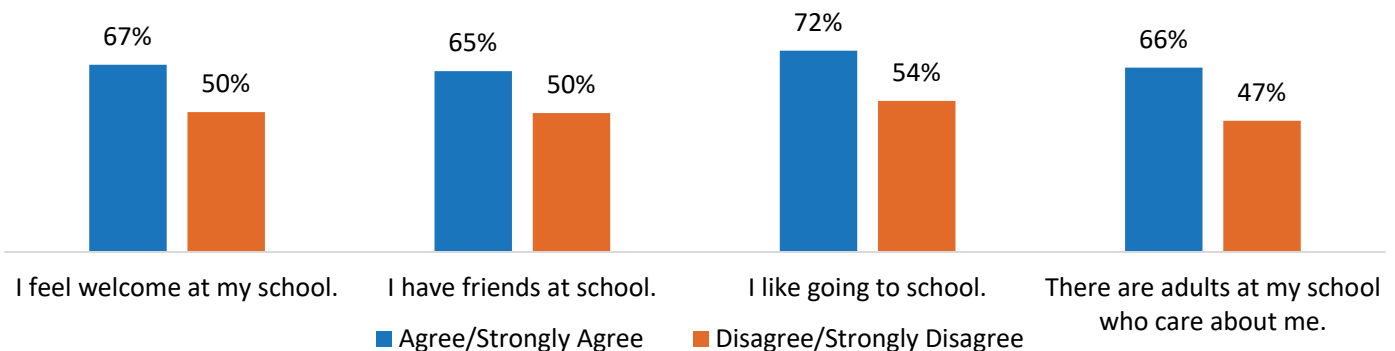
“This was my first year at [school] and I felt really welcomed.” – Oregon Student

“My school is a place to build bonds with people you didn't before and make great friends that might stay with you for the rest of your life.” – Oregon Student⁵

Students were as much as 19 percentage points more likely to be regular attenders if they agreed that there are adults at school who care about them (grades 9-11). The difference was largest for high school students, but there was a significant gap between those who agreed and disagreed for all grade bands. This impact is consistent with other research showing that having a caring adult at school is associated with increased attendance.⁶ One study of adult volunteer reading partners (working in a one-on-one mentorship relationship with students) found that students in the program were more likely to attend school on the specific days when they were scheduled to meet with their partners.⁷

Sense of Belonging is Consistently Associated with Higher Attendance

2021-22 Regular Attender Rates by Sense of Belonging Item Responses, Students in Grades 9-11



Data for additional grade bands and items is presented in [the appendices](#)

² These data should not be considered representative of all Oregon students, but should be examined for their ability to shed light on common student experiences that may be happening across the state. Demographics of SEED survey respondents were similar to the demographics of Oregon students statewide. The survey, which provides multiple language versions, universal tools, designated supports, and accommodations that students need for access, is available to all Oregon public schools and districts, but was optional for schools and districts to administer in 2021-22. ODE anticipates expanded use in future years.

³ [A full list of items asked on each grade level's version of the survey is available](#) online.

⁴ Present for more than 90% of the days they were expected to attend, within their enrolled district as of the first school day in May 2022. Students with fewer than 75 days of standard enrollment within that district are excluded from the calculation. More details and resources are available from ODE's [chronic absenteeism webpage](#).

⁵ Selected from responses to "Is there anything else about your school you would like to share?" short answer question, 2020-21 SEED survey.

⁶ Lamb, Brittani A., Knoo Lee, Sarah M. Espinoza, and Barbara J. McMorris. "The power of connectedness: Associations between caring non-parental adult relationships, school attendance, and discipline among foster-involved youth." *Children and Youth Services Review* 142 (2022): 106633.

⁷ Volkman, Brian, and Lynn Bye. "Improved school attendance through adult volunteer reading partners." *Children & Schools* 28, no. 3 (2006): 145-152.

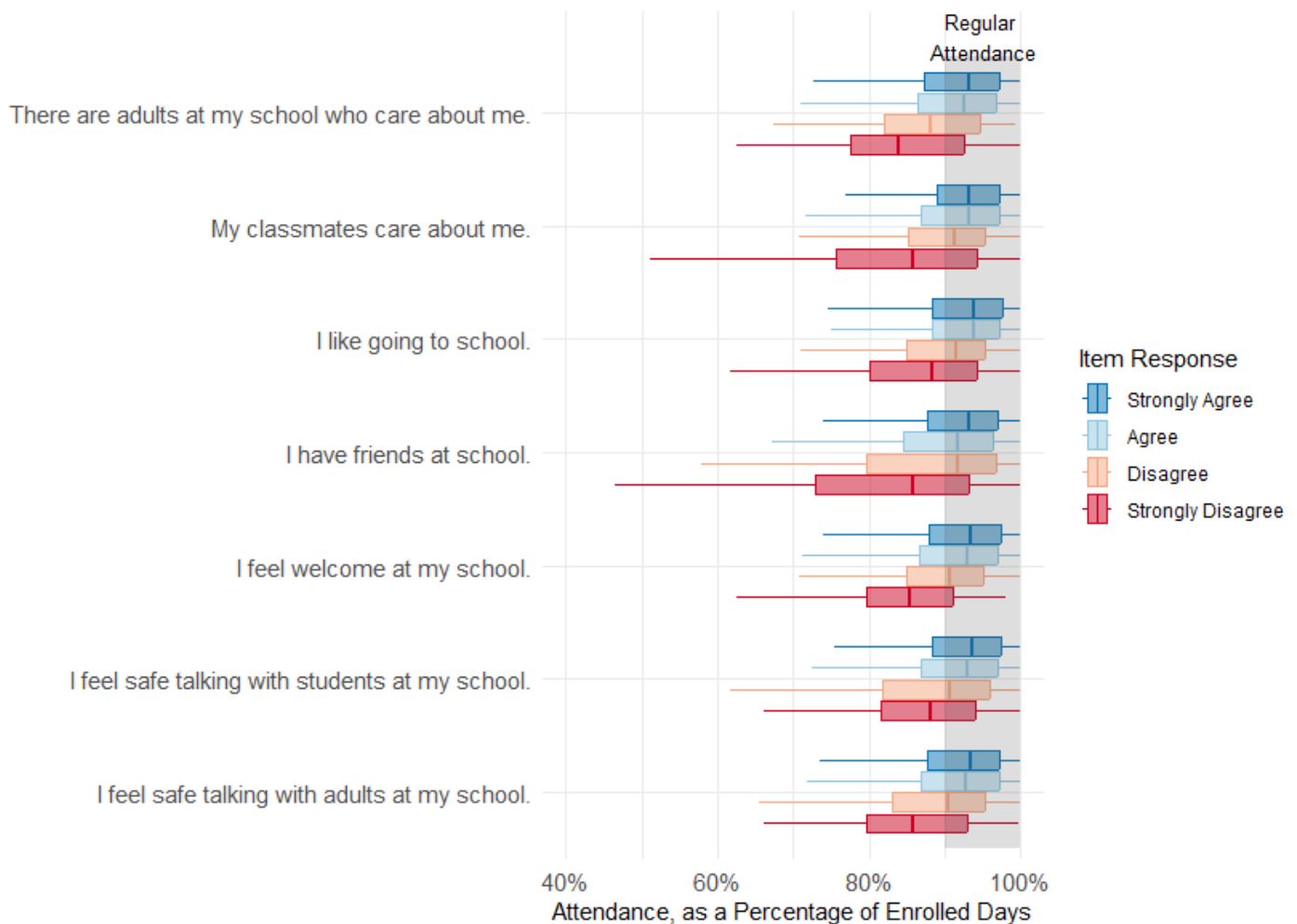
The other sense of belonging items (feelings of safety talking with students and/or adults, and belief that their classmates care about them) were also positively associated with regular attendance, but less strongly in each grade band than the four items shown above; data for additional grade bands and items is available in [the appendices](#).

“My school is really helpful and the teachers listen to us and are kind.” – Oregon Student⁸

In general, attendance increases with level of agreement for all grade levels and items. Students reporting that they “strongly disagree” with an item consistently average lower attendance rates than those who reported that they disagree, who in turn have lower attendance rates than students who agree. The magnitude of the difference is greater for students in higher grade levels, to the point that, for some indicators, more than half of students reporting strong disagreement were chronically absent. Rates for students in grade 11, the largest differences, are presented below; additional data on attendance rates can be found in [the appendices](#).

2021-22 Attendance Rates⁹ by Sense of Belonging Response

Students in Grade 11



[Boxplots show the distribution of data](#), with the colored boxes representing the 25th through 75th percentile of the data. The central bar marks the median of the data. When the median falls below the gray shaded box (which shows 90%+ attendance) in these charts, it indicates that more than half of the students represented were chronically absent. Additional data on attendance rates can be found in [the appendices](#).

⁸ Selected from responses to “Is there anything else about your school you would like to share?” 2020-21 SEED survey.

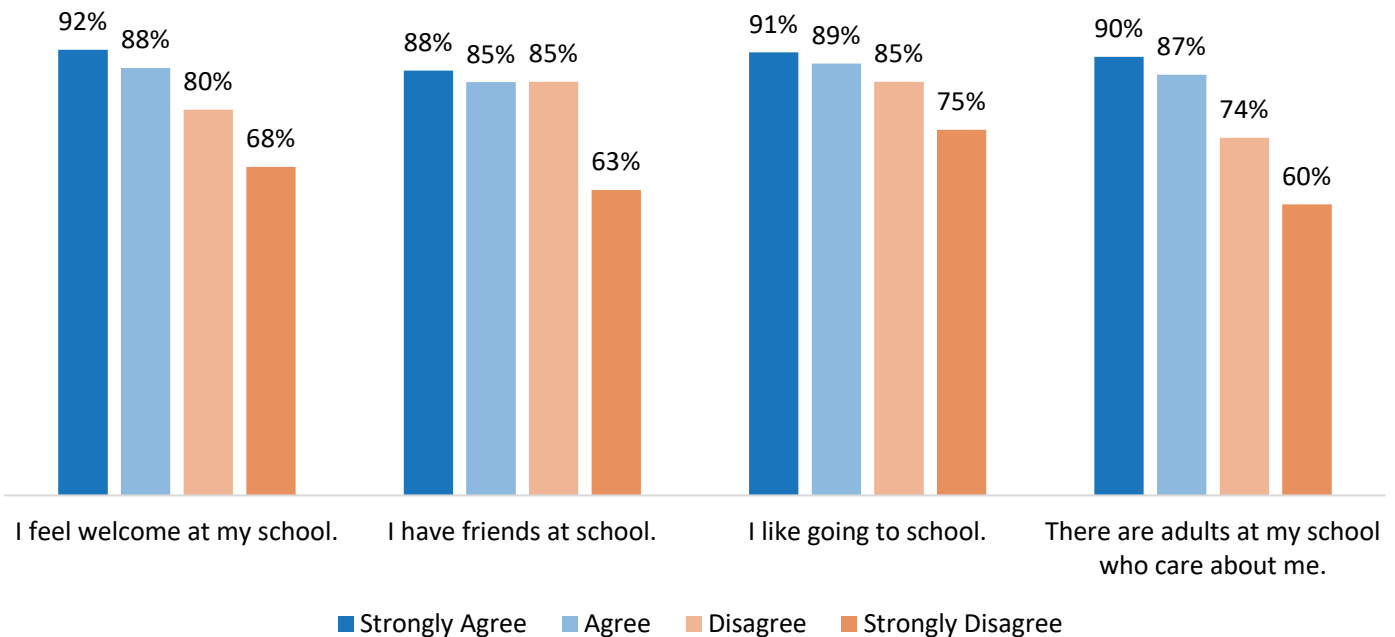
⁹ Number of days attended, divided by total school days for which the student was enrolled, within the district in which the student was enrolled on the first school day in May, 2022. Students with fewer than 75 days of standard enrollment within their May district were excluded. More data on this measure is available in ODE’s [Attendance and Absenteeism reports](#).

As shown above, among 11th graders a majority (between 55 and 69%) of those who strongly disagreed with any of the items above were chronically absent – a much greater proportion than among those who merely disagreed with an item, in many cases. The highest chronic absenteeism rate was among students who strongly disagreed that there are adults in their school who care about them, at 69%. For most of the items, more than 25% of students who strongly disagreed (shown by the leftmost edge of the boxes in the chart above) were not just chronically absent, but severely chronically absent (attending 80% or fewer of their enrolled days; equivalent to missing an average of one day every week in most districts).

Ninth Grade On-Track

Oregon’s measure of on-track status includes students who have earned at least 25% of the credits needed for an Oregon high school diploma by the end of their first year of high school. The measure has been shown to be strongly correlated to a student’s eventual likelihood of on-time graduation.¹⁰

Sense of Belonging Is Associated with Being On-Track to Graduation
2021-22 9th Grade On-Track Rates by Sense of Belonging Response



Note that not all differences are statistically significant at $p < 0.05$, due to small sample sizes. Results for all items are available in [the appendices](#).

As with regular attendance, there was a stronger [correlation](#) between sense of belonging and being on-track to graduate for items reflecting comfort in the school environment (I feel welcome at school; I have friends at school; I like going to school) and feeling cared for by school adults. The remaining items were still correlated with on-track status, but less strongly. For some indicators, particularly “I have friends at school” and “There are adults at my school who care about me,” the data also reflect a large difference between students who disagree and students who strongly disagree. While the overall number of ninth graders strongly disagreeing was small in most cases (less than 10% of respondents for most indicators; 18% for “I like going to school”)¹¹, the gulf between the two groups may indicate more differences than just strength of feeling. Particularly for students who reported strong disagreement with statements like “There are adults at my school who care about me,” these responses may be considered strong indicators of disconnection.

¹⁰ For more information on this relationship, see previous ODE briefs [Predictors of On-time High School Graduation](#), and [On-Track Status as a Predictor of Graduation](#). Note that this measure only includes students who were enrolled in the same district for the first school day in May and at least half of the school year (full academic year).

¹¹ [Full item response data](#) for all SEED items is available online.

Students who Struggle to Find Connection

While the SEED Survey does not explicitly capture details about students’ sense of belonging responses, a few students chose to use their constructed response (“Is there anything else about your school you would like to share?”) to elaborate. These responses, while not comprehensive or representative, provide additional insight into the feelings and sense of belonging of these students. Students who strongly disagreed with the statement “I have friends at school” sometimes reported feeling like a “failure” or “ach[ing] for friends,” and negative impacts to their mental health from their struggles to find friends. Others cited experiences of being bullied, experiences of bias, and a sense of being “lonely.”¹² Some described practical difficulties making or keeping friends, including schedule changes or transitions to online school that made connection more difficult.

Several students mentioned connection to teachers and other caring adults as a moderating influence; for example: “I love my school as well as the teachers...I can’t make any sort of connection to my [peers] however my teachers I would classify as my friends that are there for me to improve.” One student commented “I really like how nice and thoughtful my teacher(s) that are around me are. [My classmates] already have friend groups so I feel left out sometimes. Overall they are all pretty nice.”

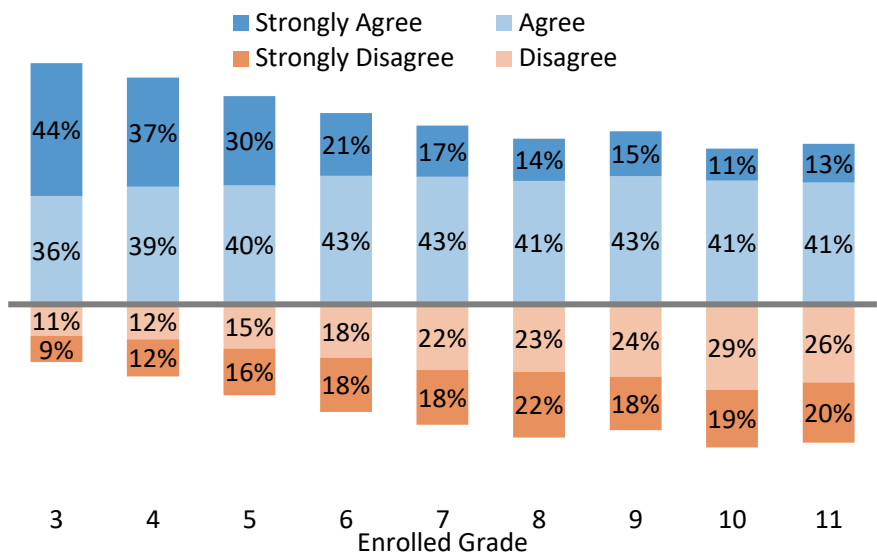
More information about students’ reported lived experiences in schools, and resources/practices to better support them, can be found in [In Their Own Words](#), a companion data brief using additional data from the SEED Survey. This brief includes descriptions of student experiences of bias, bullying, and safety/unsafety within their schools.

Students with a Strong Dislike of School

With the exception of “I have friends at school,” student responses to sense of belonging items trend more negatively in higher grades, and over time.¹³ While some non-completing students do leave school throughout high school grades, the vast majority of non-completers remain enrolled through their junior year, with their last enrollment at the end of their junior year or during their senior year.¹⁴ Responses to sense of belonging items on surveys administered in 9th, 10th, or 11th grades are unlikely to reflect significant attrition bias.

Students Report More Strongly Negative Perceptions of School in Higher Grade Levels

2021-22 Agreement/disagreement with the statement "I like going to school" by grade level



Literature suggests several possible explanations for students with a strong dislike of school and strong disagreement with sense of belonging indicators. Research in this area has found that, while many students miss school due to competing priorities (e.g. seeking relationship with family/friends, engaging in a more enjoyable activity, having a need to work or care for siblings) there also exists a subset of students who experience a high degree of stress, anxiety, or fear associated with school,¹⁵ and avoid attending for that reason. These feelings were frequently associated with past experiences of bullying, trauma, and other stressful events, and in some cases avoiding school may be understood as an adaptive strategy to avoid a

¹² Quotations and paraphrases from 2020-21, 2021-22, and 2022-23 SEED responses.

¹³ See [Student Sense of Belonging in Schools: Predictive Factors](#), pages 7 and 8, for more details.

¹⁴ See [Fourth-year Non-Completers](#) for more details.

¹⁵ Dube, Shanta R., and Pamela Orpinas. "Understanding excessive school absenteeism as school refusal behavior." *Children & Schools* 31, no. 2 (2009): 87-95.

physically or emotionally dangerous environment.¹⁶ This type of school aversion is particularly undertreated for students from non-dominant cultures due to the school system’s historic predisposition to treat the resulting attendance problems as truancy rather than as an indicator of unmet social, emotional, and mental health needs.¹⁷

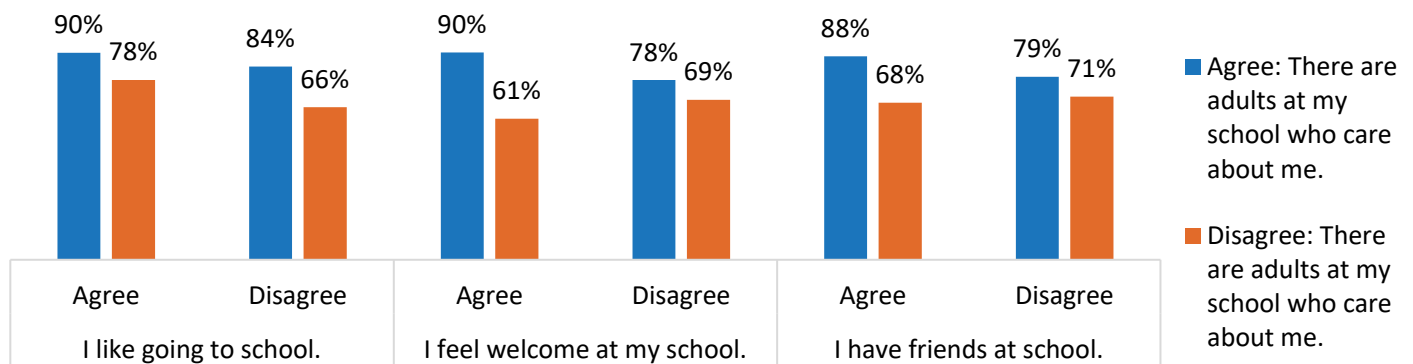
Although the SEED Survey does not examine student safety, Oregon Student Health Survey data largely validates these interpretations as applied to Oregon students. Students who agreed with the statement “I feel safe at my school” on the survey were substantially less likely to report missing days of school, and reported generally higher grades in all three grade levels surveyed in 2022 (6th, 8th, and 11th).¹⁸ A similar relationship was observed with the “everyday discrimination” items, with students who reported a higher frequency of being “called names, insulted, threatened, or harassed” and “people [acting] as if they think you are not smart” also reporting lower grades and attendance (in both 8th and 11th grade; these items were not part of the 6th grade survey).

The Protective Effect of Caring Adults

Research on positive student-adult relationships, as well as some of the constructed responses offered through SEED, suggests that caring adults in a school may offer a protective effect for students who otherwise feel isolated within their school communities. Although most respondents agreed with both statements, by comparing students who agreed/disagreed with both “I have friends at school” and “There are adults at my school who care about me,” it is evident that the perception of caring adults offers a significant protective effect.

The Presence of Caring Adults is the Strongest Predictor of On-Track Status

2021-22 9th Grade On-Track Rates by combined SEED Responses¹⁹



Students who did not feel that they have friends at school were 8.6 percentage points more likely to be on-track to graduate when they agreed there were adults who cared about them. Students who felt that they did have friends at school were nearly 20 percentage points more likely to be on-track to graduate when they agreed there were adults who care about them. Among those who did not feel that there were adults at school who care about them, having friends at school appeared to make little difference to on-track status.

As shown above, students who agreed that there are adults at school who care about them were consistently more likely to be on-track to graduate than those who did not, even when those students agreed with other sense of belonging items. For

¹⁶ Lehman, Brett. "Hate at school: Victimization and disorder associated with school avoidance." *Sociological Spectrum* 40, no. 3 (2020): 172-190.

¹⁷ González, Carolina, Ricardo Sanmartín, María Vicent, and José Manuel García-Fernández. "Exploring different types of school refusers through latent profile analysis and school-related stress associations." *Science Progress* 104, no. 3 (2021): 00368504211029464.

¹⁸ [Oregon Student Health Survey Crosstabs](#), comparison of responses to “I feel safe at my school” and either “What kind of grades do you usually get in school?” or “In the past 30 days have you missed any days of school?”

¹⁹ Though there are likely differences between strongly agree/agree and strongly disagree/disagree, the categories were combined for the purpose of this analysis due to small sample size.

example, students who agreed that there are adults in their school who care about them, but disliked going to school, had a higher on-track rate than students who liked going to school but did not agree that adults in their school care about them.

Discussion

This data brief validates previous research that has found sense of belonging, particularly the presence of a caring adult willing to work to foster relationships with students, to be key to student engagement and success in school.^{20,21} There was up to a 20 percentage point gap in outcomes between students who agreed and disagreed with sense of belonging items, and there was a consistent difference for both 9th grade on-track and regular attendance. While responses to sense of belonging items are generally moderately correlated with each other, student perception of adults who care about them was a strong predictor of credit attainment even when students reported disagreement with other sense of belonging items.

Although students who do not report high sense of belonging had worse outcomes on these two measures, their very presence in the data²² can also be seen as evidence of the assets these students bring to school – particularly, their persistence and courage in continuing to show up, however irregularly, to schools they do not like and in which they do not feel cared for or welcome. There is an opportunity here for an intervention with these students: recognizing those assets and connecting these students with caring adults could potentially enable them to make enormous gains in their education. The data show that students disengage and report lower sense of belonging as they advance grade levels – halting this trend in early grades may prove to be simpler than reversing it for older students, though both are important.

Limitations to this analysis include low participation rates, with many Oregon districts choosing not to administer the survey in 2021-22. While participation is sufficient to provide demographic analysis in the previous brief ([Student Sense of Belonging in Schools: Predictive Factors](#)), the additional narrowing of the sample in this brief in order to look at a single grade's results and the full range of response data does not provide sufficient sample size to make inferences about how demographics may impact these results. In future years, ODE anticipates increased participation in the SEED Survey due to a new legislative requirement. This should allow for follow-up research examining these questions in greater detail.

Across grade levels, students' sense of belonging was a strong predictor of attendance and credit attainment. Recommendations, resources, and best practices to support students' sense of belonging and engagement can be found in the previous brief: [Student Sense of Belonging in Schools: Predictive Factors](#).

“ My school is a wonderful school filled with amazing and caring teachers...if you need help come to our school, it's the best and there's so much to learn. You will always be welcome...and have nice and respectful staff and teachers that will always welcome you and will always want to get to know you. ” – Oregon Student²³

Thanks to the SEED team; our colleagues in the Office of Research, Assessment, Data, Accountability & Reporting; and the thousands of Oregon students who completed the SEED Survey

²⁰ Keyes, Tasha Seneca. "A qualitative inquiry: Factors that promote classroom belonging and engagement among high school students." *School Community Journal* 29, no. 1 (2019): 171-200.

²¹ Wilkins, Julia. "School characteristics that influence student attendance: Experiences of students in a school avoidance program." *The High School Journal* (2008): 12-24.

²² Not dropping out/being pushed out of school.

²³ Selected from responses to "Is there anything else about your school you would like to share?" short answer question, 2020-21 SEED survey.

Appendix A: Regular Attendance

Percent of Students in Each Response Category who were Regular Attenders

Prompt	Grade Band	Agree/Strongly Agree	Disagree/Strongly Disagree
I feel safe talking with adults at my school.	Grades 3-5	72%	64%
	Grades 6-8	72%	65%
	Grades 9-11	68%	53%
I feel safe talking with students at my school.	Grades 3-5	72%	64%
	Grades 6-8	71%	66%
	Grades 9-11	67%	54%
I feel welcome at my school.	Grades 3-5	72%	63%
	Grades 6-8	72%	61%
	Grades 9-11	67%	50%
I have friends at school.	Grades 3-5	71%	62%
	Grades 6-8	70%	60%
	Grades 9-11	65%	50%
I like going to school.	Grades 3-5	73%	63%
	Grades 6-8	75%	63%
	Grades 9-11	72%	54%
My classmates care about me.	Grades 3-5	72%	66%
	Grades 6-8	73%	63%
	Grades 9-11	68%	55%
There are adults at my school who care about me.	Grades 3-5	71%	62%
	Grades 6-8	71%	60%
	Grades 9-11	66%	47%

Appendix B: 9th Grade On-Track

2021-22 9th Grade On-Track Rates by Item Response

Prompt	Strongly Agree	Agree	Disagree	Strongly Disagree
I feel safe talking with adults at my school.	93%	87%	81%	77%
I feel safe talking with students at my school.	91%	85%	84%	83%
I feel welcome at my school.	92%	88%	80%	68%
I have friends at school.	88%	85%	85%	63%
I like going to school.	91%	89%	85%	75%
My classmates care about me.	93%	88%	80%	80%
There are adults at my school who care about me.	90%	87%	74%	60%

Appendix C: Boxplots for SEED Sense of Belonging Indicators relative to Attendance Rates, 2021-22



[Boxplots show the distribution of data](#), with the shaded boxes representing the 25th through 75th percentile of the data. The central bar marks the median of the data. When the median falls below the gray shaded box in these charts, it indicates that more than half of the students represented were chronically absent.



