

Anchorage School District Tax Calculation

The Anchorage School District (ASD) fiscal year (FY) starts July 1 and ends June 30 of the following calendar year. Since Municipal taxes are levied by calendar year, the taxes for ASD are totaled by adding half of the tax need from the ASD FY ending June 30 to half of the tax need from the ASD FY beginning July 1 in the calendar year. The ASD tax need is determined in the ASD annual budgets.

For 2026, the ASD tax need is calculated as follows:

Fiscal Year	Approving Document	Fiscal Year Tax Need		2026 Tax Need	2026
2025-2026	AO 2025-29	\$ 267,342,224	/2	\$ 133,671,112	Jan-Jun
2026-2027	AO 2026-21	\$ 282,978,686	/2	\$ 141,489,343	Jul-Dec
2026 *	AO 2026-21	\$ 2,042,809		\$ 2,042,809	Jan-Dec
ASD Tax need for Tax Year Total				\$ 277,203,264	

The ASD mill rate is calculated based on the tax need (1/2 of FY ending in June plus 1/2 of FY starting July), divided by the taxable assessed valuation of the service area, then multiplied by 1,000.

$$\frac{\text{ASD Tax Need for Tax Year}}{\text{Areawide Service Area Taxable Assessed Value}} \times 1,000 = \text{Mill Rate}$$

The 2026 ASD mill rate, based on the 2026 ASD tax need and the Areawide service area taxable assessed value at 04/09/2026, is calculated as follows:

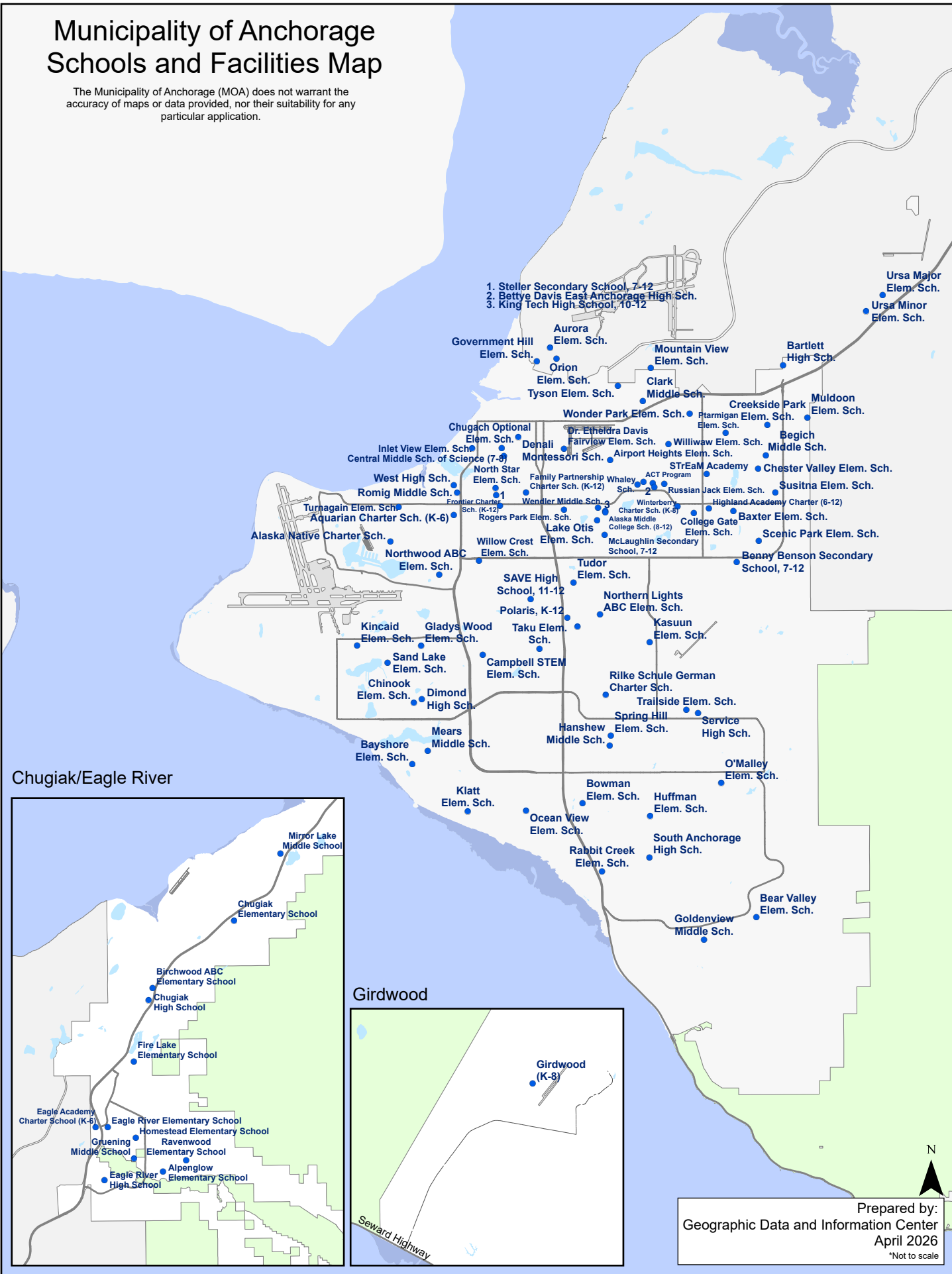
$$\frac{\$ 277,203,264}{\$ 43,859,437,334} \times 1,000 = 6.32$$

* The 2026 ASD tax need includes \$2,042,809 in local property taxes to pay bond debt associated with the State's underfunding of bond debt reimbursement in 2025-2026, tied to bonds passed prior to 2015.

Municipality of Anchorage Schools and Facilities Map

The Municipality of Anchorage (MOA) does not warrant the accuracy of maps or data provided, nor their suitability for any particular application.

- 1. Steller Secondary School, 7-12
- 2. Bettye Davis East Anchorage High Sch.
- 3. King Tech High School, 10-12



Prepared by:
 Geographic Data and Information Center
 April 2026
 *Not to scale

Municipal Clerk's Office

Approved

Date: **April 28, 2026**

Submitted by: Chair of the Assembly at the request of the Mayor

Prepared by: Office of Management & Budget
For Reading: April 14, 2026

**ANCHORAGE, ALASKA
AO NO. 2026 – 44**

AN ORDINANCE OF THE MUNICIPALITY OF ANCHORAGE SETTING THE RATE OF TAX LEVY, APPROVING THE AMOUNT OF MUNICIPAL PROPERTY TAX, AND LEVYING TAXES FOR THE ANCHORAGE SCHOOL DISTRICT FOR THE TAX YEAR 2026.

THE ANCHORAGE ASSEMBLY ORDAINS:

Section 1. The Assembly hereby fixes the rate of the tax levy for the Anchorage School District for tax year 2026. The Anchorage Assembly levies this tax upon the full value of all assessed taxable real and personal property:

Areawide School District, Areawide a tax of 6.32 mills

Section 2. The property tax amount approved for 2026 is:

Anchorage School District, Areawide \$277,203,264

Section 3. This ordinance shall become effective immediately upon passage and approval by the Anchorage Assembly.

PASSED AND APPROVED by the Anchorage Assembly this 28th day of April, 2026.

Christopher Constant

ATTEST: Chair

Jenii King

Municipal Clerk



MUNICIPALITY OF ANCHORAGE

Assembly Memorandum

AM No. 238 – 2026

Meeting Date: April 14, 2026

1 **FROM: MAYOR**

2
3 **SUBJECT: AN ORDINANCE OF THE MUNICIPALITY OF ANCHORAGE**
4 **SETTING THE RATE OF TAX LEVY, APPROVING THE AMOUNT OF**
5 **MUNICIPAL PROPERTY TAX, AND LEVYING TAXES FOR THE**
6 **ANCHORAGE SCHOOL DISTRICT FOR THE TAX YEAR 2026.**
7

8 This memorandum transmits the ordinance to establish the 2026 tax rate and tax levy
9 for the Anchorage School District (ASD).

10
11 The ASD tax rate and tax levy are based on the amount of property taxes approved
12 to support the ASD operating budget in calendar year 2026 as follows:

- 13 • Half of the \$267,342,224 of property taxes approved for ASD's fiscal year 2025-
14 2026 operating budget, per AO 2025-29(S)
- 15 • Half of the \$282,978,686 of property taxes approved for ASD's fiscal year 2026-
16 2027 operating budget, per AO 2026-21(S)
- 17 • The 2026 ASD tax need includes \$2,042,809 in local property taxes to pay bond
18 debt associated with the State's underfunding of bond debt reimbursement in
19 2025-2026, tied to bonds passed prior to 2015, per AO 2026-21(S)

20
21 To calculate mill rates, property taxes approved to support ASD's operating budget
22 are divided by taxable assessed values:

$$23 \frac{\text{ASD Approved Property Taxes for Tax Year}}{\text{Areawide Service Area Taxable Assessed Value}} \times 1,000 = \text{Mill Rate}$$

$$24 \frac{\$277,203,264}{\$43,859,437,334} \times 1,000 = 6.32$$

25
26
27
28
29
30 **THE ADMINISTRATION RECOMMENDS APPROVAL.**

31 Prepared by: Office of Management & Budget (OMB)
32 Approved by: Ona R. Brause, OMB Director
33 Concur: Eva Gardner, Municipal Attorney
34 Concur: Philippe D. Brice, Chief Fiscal Officer
35 Concur: William D. Falsey, Chief Administrative Officer
36 Concur: Rebecca A. Windt Pearson, Municipal Manager
37 Respectfully Submitted: Suzanne LaFrance, Mayor

MUNICIPALITY OF ANCHORAGE
Summary of Economic Effects -- Anchorage School District

AO Number: 2026-44

Title: **AN ORDINANCE OF THE MUNICIPALITY OF ANCHORAGE SETTING THE RATE OF TAX LEVY, APPROVING THE AMOUNT OF MUNICIPAL PROPERTY TAX, AND LEVYING TAXES FOR THE ANCHORAGE SCHOOL DISTRICT FOR THE TAX YEAR 2026.**

Sponsor: **MAYOR**
 Preparing Agency: Office of Management & Budget
 Others Impacted:

CHANGES IN EXPENDITURES AND REVENUES:	(In Thousands of Dollars)				
	FY26	FY27	FY28	FY29	FY30
Operating Expenditures					
Salaries and Benefits	\$ -	\$ -	\$ -	\$ -	\$ -
Non-Labor	-	-	-	-	-
Transfers to Other Funds	277,203	-	-	-	-
Debt Service	-	-	-	-	-
TOTAL DIRECT COSTS:	\$ 277,203	\$ -	\$ -	\$ -	\$ -
Add: Charges from Others	\$ -	\$ -	\$ -	\$ -	\$ -
Less: Charges to Others	-	-	-	-	-
FUNCTION COST:	\$ 277,203	\$ -	\$ -	\$ -	\$ -
REVENUES:	\$ 277,203	\$ -	\$ -	\$ -	\$ -
CAPITAL:	\$ -	\$ -	\$ -	\$ -	\$ -
POSITIONS: FT/PT and Temp	0	0	0	0	0

PUBLIC SECTOR ECONOMIC EFFECTS:

A total of \$277,203,264 in property tax collection revenue will be received for Anchorage School District operations and debt for the 2026 calendar year and will be contributed to the Anchorage School District.

PRIVATE SECTOR ECONOMIC EFFECTS:

A total of \$277,203,264 in property taxes for Anchorage School District operations and debt will be paid by Anchorage taxpayers as 6.32 mills or \$632 per \$100,000 of taxable assessed valuation for the 2026 calendar year.

Prepared by: Office of Management & Budget

Phone: 907-343-4496

Municipal Clerk's Office
Approved
Date: **April 2, 2025**

Submitted by: Chairman of the Assembly
at the request of the
School Board
Prepared by: Anchorage School District
For Reading: March 4, 2025[4]
(S) Submitted by: Assembly Chair Constant
Vice Chair Zaletel
(S) Prepared by: Assembly Counsel's Office
(S) For reading: April 2, 2025

**ANCHORAGE, ALASKA
AO NO. 2025-29(S)**

1 AN ORDINANCE DETERMINING AND APPROVING THE TOTAL AMOUNT OF THE
2 ANNUAL OPERATING BUDGET OF THE ANCHORAGE SCHOOL DISTRICT FOR ITS
3 FISCAL YEAR 2025-2026 AND DETERMINING AND APPROPRIATING THE PORTION
4 OF THE ASSEMBLY APPROVED BUDGET AMOUNT TO BE MADE AVAILABLE FROM
5 LOCAL SOURCES; **AND APPROVING EXPENDITURE OF FUNDS IN EXCESS OF THE**
6 **TOTAL AMOUNT APPROVED HEREIN ONLY BY AN AMOUNT RESULTING FROM THE**
7 **STATE OF ALASKA ENACTING AN INCREASE TO THE BASE STUDENT**
8 **ALLOCATION STATUTE, IF ANY.**

9
10 THE ANCHORAGE ASSEMBLY ORDAINS:

11
12 Section 1. That the FY 2025-2026 Proposed Anchorage School District
13 Financial Plan in the amount of \$866,250,188 has been approved by the Anchorage
14 Assembly and that, the amount of \$267,342,224 is to be contributed from local property
15 taxes or other local sources and is hereby appropriated for school purposes to fund the
16 School District for its 2025-2026 fiscal year.

17
18 **Section 2. Pursuant to Anchorage Municipal Charter § 6.05(b), the**
19 **Assembly approves spending above the total budget amount approved in Section 1**
20 **only if the State of Alaska enacts an increase to the Base Student Allocation (BSA)(AS**
21 **§ 14.17.470) effective on or before July 1, 2025, and only by an amount not to exceed:**
22 **(the dollar increase in the BSA above \$5,960)**
23 **x 71,160 (the District's Adjusted Average Daily Membership).**

24
25
26 **This approval is limited to the above condition and state funding, and does not**
27 **authorize or approve any additional contribution from local property taxes or other**
28 **local sources.**

29
30 Section **3[2]**. That this ordinance is effective upon passage and approval.

31
32 PASSED AND APPROVED by the Anchorage Assembly, this 2nd day of April, 2025.

33
34 *Christopher Constant*

35
36 Chair

37 ATTEST:

38 *Jamie Lemay*

39
40 Municipal Clerk

MUNICIPALITY OF ANCHORAGE

ASSEMBLY MEMORANDUM

AM No. 163-2025

Meeting Date: March 4, 2025

FROM: ANCHORAGE SCHOOL DISTRICT

SUBJECT: AO 2025-29 ANCHORAGE SCHOOL DISTRICT
FY 2025-2026 FINANCIAL PLAN

PROPOSED FINANCIAL PLAN

The Anchorage School Board has approved the Proposed Financial Plan and Budget for FY 2025-26 in the amount of \$866,250,188. The total proposed Anchorage School District budget by individual fund is projected as follows:

Municipal Upper Limit Summary

Governmental Funds Summary (in millions \$)	Actual [1]	Actual [1]	Actuals [1]	Adopted	Proposed	FY25 Adopted vs.	
	FY 2021-22	FY 2022-23	FY 2023-24	Budget	Budget	FY26 Proposed	
				FY 2024-25	FY 2025-26	\$	%
General Fund	\$ 550.262	\$ 517.874	\$ 622.972	\$ 637.820	\$ 594.619	\$ (43.201)	-6.8%
Project Carryover [2]	-	-	-	30.000	30.000	-	0.0%
Transportation Fund	22.278	25.389	30.509	30.837	32.260	1.423	4.6%
Grants Fund	98.443	135.958	89.298	67.670	91.677	24.007	35.5%
Debt Service Fund	66.819	70.752	62.135	54.597	47.314	(7.283)	-13.3%
Capital Projects Fund [3]	2.141	11.854	21.320	39.953	33.298	(6.655)	-16.7%
Student Nutrition Fund	22.261	22.200	23.789	25.463	29.181	3.718	14.6%
Student Activities Fund	3.713	5.718	5.817	7.900	7.900	-	0.0%
ASD Managed Total	765.917	789.745	855.840	894.240	866.250	(27.990)	-3.1%
SOA PERS/TRS On-behalf	57.939	33.951	36.302	50.000	50.000	-	0.0%
Total All Funds	\$ 823.856	\$ 823.696	\$ 892.142	\$ 944.240	\$ 916.250	\$ (27.990)	-3.0%

[1] GAAP basis expenditures with on-behalf pension payments removed from individual funds

[2] Accounting practice for transparency and efficiency only - not additional funding

[3] Capital Projects includes capital Legislative grants and General Fund contributions only; voter approved bond projects that are repaid through debt service have been excluded

The upper limit spending authorization of \$866,250,188 for FY 2025-26, is a decrease of \$27,990,396 from the prior year. The overall decrease in upper limit spending is primarily due to a loss in state revenue resulting in a decrease in General Fund revenue and expenditures.

It is requested that the Anchorage Assembly approve local property taxes in the amount of \$267,342,224, an increase of \$3,397,453 from the prior year, or about 1.29 percent. The tax increase is primarily due to the increase to the required local

1 contribution as a result of the increase to the 2024 Anchorage property full value
 2 determination and increased costs in Student Transportation coupled with flat
 3 state transportation funding. These increases are partially offset by decreases in
 4 Debt repayment from the utilization of Debt Service fund balance and a decrease
 5 in Additional Local Contribution request due to enrollment declines. The change
 6 in taxes by type is shown in the table below:
 7

	FY25	FY26	\$ Change	% Change
Anchorage Property Values	\$ 45,343,124,634	\$ 48,188,712,215	\$ 2,845,587,581	6.28%
Required Local Contribution	120,159,280	127,700,087	7,540,807	6.28%
Additional Local Contribution	100,612,712	97,808,423	(2,804,289)	-2.79%
Transportation	9,060,354	12,925,975	3,865,621	42.67%
Debt Service	34,112,425	28,907,739	(5,204,686)	-15.26%
Total Local Support	\$ 263,944,771	\$ 267,342,224	\$ 3,397,453	1.29%

8
9
10 **PROPERTY TAXES AND ENROLLMENT**

11
12 The chart below shows the amount of taxes the District is requesting by both
 13 fiscal year (FY), which is July 1 through June 30, and calendar year (CY). Fiscal
 14 year taxes are collected over the course of two calendar years, e.g. the second half
 15 of the FY 25 tax request (January 1, 2025 – June 30, 2025) and the first half of the
 16 FY 26 tax request (July 1, 2025 – December 31, 2025) makes up the total calendar
 17 year 2025 request.
 18

19 **FY 2025-26 Proposed Budget Property Tax Request**

	Approved Budget FY 2024-2025	Proposed Budget FY 2025-2026	Increase/ (Decrease)	Percent Change
Total Property Taxes (FY)	263,944,771	267,342,224	3,397,453	1.29%
Total Property Taxes (CY)	263,714,389	265,643,499	1,929,110	0.73%
Estimated Assessed Valuation (CY)	39,464,975,293	39,564,689,895	99,714,602	0.25%
Estimated Mill Rate (CY)	6.68	6.71	0.03	0.51%

20
21 While taxes requested for ongoing operations are expected to increase by .73
 22 percent for calendar year 2025, the overall tax burden and mill rates are set to
 23 increase by .51 percent for the year.
 24

25 Enrollment is expected to stagnate, with a slight decrease in average daily
 26 membership of .47 percent. The total projected District enrollment is shown below:
 27


	Actual FY 2024-2025 October 2024	Projected FY 2025-2026 October 2024	Increase/ (Decrease)	Percent Change
Average Daily Membership	42,018	41,821	(198)	-0.47%
Students with Intensive Needs	1,120	1,120	-	0%

1
2 Additional information regarding changes in revenue and expenditures specific
3 to each fund, as well as programmatic and staffing changes specific to academic
4 programs and support services, can be found in the budget document.

5
6 The FY 2025-26 Proposed Financial Plan and Budget continues the Anchorage
7 School Board's commitment to improving the education of all students.

8
9 **The Anchorage School District requests the full support of the Anchorage**
10 **Assembly for this budget and in the ongoing efforts to continue a community**
11 **dialogue that focuses on building on the momentum ASD has achieved.**

12
13
14
15 Respectfully submitted,

16
17 
18 Dr. Jharrett Bryantt
19 Superintendent
20
21

22 JB/AR

23
24 Attachments include:

25
26 February 25, 2025 Preliminary Budget Memo

27
28 Comb Bound / PDF Proposed FY 2025-26 Budget under separate cover.



MUNICIPALITY OF ANCHORAGE ASSEMBLY MEMORANDUM

No. AM 317-2025

Meeting Date: April 2, 2025

1 **From: Assembly Chair Constant and Vice Chair Zaletel**

2
3 **Subject:** AN ORDINANCE DETERMINING AND APPROVING THE TOTAL
4 AMOUNT OF THE ANNUAL OPERATING BUDGET OF THE
5 ANCHORAGE SCHOOL DISTRICT FOR ITS FISCAL YEAR 2025-
6 2026 AND DETERMINING AND APPROPRIATING THE PORTION
7 OF THE ASSEMBLY APPROVED BUDGET AMOUNT TO BE MADE
8 AVAILABLE FROM LOCAL SOURCES; AND APPROVING
9 EXPENDITURE OF FUNDS IN EXCESS OF THE TOTAL
10 AMOUNT APPROVED HEREIN ONLY BY AN AMOUNT
11 RESULTING FROM THE STATE OF ALASKA ENACTING AN
12 INCREASE TO THE BASE STUDENT ALLOWANCE STATUTE, IF
13 ANY.
14

15 This proposed (S) version of the ordinance provides approval to accommodate a
16 much anticipated increase to the Base Student Allocation (BSA) the Alaska
17 Legislature is now considering, contained in House bill 69 (HB 69) at Section 22.
18 The current BSA in AS 14.17.470 is \$5,960, last increased in a meaningful amount
19 in 2016, and in HB 69 will be increased by \$1,000. Anchorage School Board Vice
20 President Carl Jacobs e-mailed the Mayor and Assembly Leadership on March 10
21 with a potential suggested amendment to AO 2025-29 requesting “to increase
22 ASD's FY26 upper-limit spending authority by \$71,132,300.00, or roughly the
23 amount of anticipated revenue the District would receive should the Alaska
24 Legislature pass HB69 as drafted, to include a \$1,000 permanent increase to the
25 Base Student Allocation.” Mr. Jacobs with School Board Member Kelly Lessens
26 authored a “Jacobs/Lessens Amendment 1”, Attachment A, to modify the school
27 district’s Memorandum #096 (2025-2026), Fiscal Year 2025-2026 Preliminary
28 Budget, and populate lines of its budget with reversals to cuts from the prior year
29 applying the anticipated \$71,132,300 of funding from an increase to the BSA.
30

31 The Anchorage Assembly’s authority and role with respect to the budget of the
32 Anchorage School District is limited by state statute AS 14.14.060(c) and the Home
33 Rule Charter § 6.05. In addition to a 30-day period for Assembly action in this budget
34 approval process, Charter subsection 6.05(b) prohibits the Assembly from making
35 line item amendments within the ASD budget itself, stating:
36

37 The assembly may increase or decrease the budget of the school district only
38 as to total amount. The school district may not appropriate or otherwise incur
39 the expenditure of any funds, regardless of the source, in excess of the total
40 amount of the budget, as approved by the assembly, without prior approval
41 by the assembly.
42

1 It is quite clear the Assembly cannot, as a matter of law, amend AO 2025-29 with
 2 all the line item changes in Jacobs/Lessens Amendment 1. It is good information
 3 for how the School District is likely to amend its budget subsequently, if the total
 4 spending authority is increased as requested.

5
 6 However, it is not prudent to plan for a budget increase based on a state bill that is
 7 still in the legislative process and could be amended and changed before it is finally
 8 passed. HB68 was recently passed by the House and transmitted to the Senate, or
 9 more specifically version CSHB 69 (RLS), on March 12 and referred to the
 10 Education and Finance committees. It has not exited the Senate Education
 11 Committee at the time of submitting this memorandum. And, there is no way to
 12 predict with certainty if the \$1,000 increase in the current version will stay the same,
 13 increase, or decrease by the time it passes and is transmitted to the Governor, and
 14 no certainty whether the Governor will line-item veto the amount.

15
 16 The Assembly can, in accordance with Charter 6.05(b), approve spending “in
 17 excess of the total amount of the budget” if it defines that approval in a manner it
 18 can be determined with certainty. The (S) version exercises the authority the
 19 Assembly has, to increase the total amount approved by the eventual increase of
 20 the BSA when it is finalized and effective and multiplied by the Adjusted Average
 21 Daily Membership of the district, in accordance with the foundation formula as
 22 described in the ASD FY 2025-2026 Proposed Budget book at p. 19 and others.
 23 The (S) version will not increase any other funding source; local taxes and
 24 contributions from other sources are not affected. The (S) version will accommodate
 25 whatever BSA change results from the state, and would not require the School
 26 District to come back to request Assembly approval for additional spending. The
 27 School Board would be able and authorized to amend the budget for spending
 28 additional BSA dollars as shown in Jacobs/Lessens Amendment No. 1, or any other
 29 legitimate manner.

30
 31 **We request your support for the (S) version of the ordinance.**

32
 33 Prepared by: Assembly Counsel's Office

34
 35 Respectfully submitted: Christopher Constant, Assembly Chair
 36 District 1 – North Anchorage

37
 38 Meg Zaletel, Assembly Vice Chair
 39 District 4 – Midtown Anchorage

40
 41 Attachments: Jacobs/Lessens Amendment 1: AMENDMENT TO ASD
 42 Memorandum #096 (2025-2026), Fiscal Year 2025-2026
 43 Preliminary Budget.
 44
 45

Jacobs/Lessens Amendment 1: Attachment A
AMENDMENT TO ASD MEMORANDUM #096 (2024-25):
Fiscal Year 2025-2026 Preliminary Budget

Add the following language to ASD Memorandum #096, and include Attachment A as guidance from the Board to the Administration to amend the 2025-26 (FY26) Financial Plan and Budget once the Alaska Legislature successfully increases the Base Student Allocation as detailed below.

The Anchorage School Board intends for the Anchorage School District's 2025-26 (FY 26) Budget to provide the best possible learning environments for all students and to support adopted Board goals for 3rd Grade Reading Proficiency, 8th Grade Math proficiency, and high school graduation rates.¹

Earlier this winter, the Anchorage School Board and Anchorage Assembly asserted their joint support for a substantial State investment in public education which would, at minimum, adjust the Base Student Allocation to account for inflation since 2010-11 (FY11).² According to the State of Alaska's Legislative Finance division, that amount has been calculated to be \$1,808 for the 2024-25 school year (FY25).³

If the Legislature were to successfully amend AS 14.17.470 so as to increase the Base Student Allocation by an amount no less than \$1,000, this action would generate a minimum of \$71.1 million in new revenue for the Anchorage School District.⁴

What follows is a commitment to applying this revenue in alignment with adopted Board Goals, Board Policy,⁵ and in support of class size reductions and the retention of effective and valued programs. These actions would align with desires articulated by members of the Anchorage

¹ For adopted ASD 2023-28 Board Goals and Guardrails, see <https://www.asdk12.org/Page/18195>

² See signed "A joint resolution of the Anchorage Municipal Assembly and the Anchorage School Board in support of the fair, inflation-adjusted State funding required to maintain a quality public school system and increase student performance," passed by the ASD Board 7-0 on Dec. 17, 2024 and by the Anchorage Assembly 11-0 on Jan. 7, 2025 and shared with the House Education committee in support of HB 69 on January 27, 2025. Accessed at https://www.akleg.gov/basis/get_documents.asp?session=34&docid=96

³ "Memorandum" from Conor Bell, Alaska State Legislature Legislative Budget and Audit Committee Legislative Finance Division, to Senator Löki Tobin, September 30, 2024, as discussed by Anchorage School Board Finance Committee on October 31, 2024. See [https://go.boarddocs.com/ak/asdk12/Board.nsf/files/D9WVNL8192AC/\\$file/2024.10.02%20Legislative%20Finance%20Memo%20on%20BSA%20and%20Inflation%20\(1\).pdf](https://go.boarddocs.com/ak/asdk12/Board.nsf/files/D9WVNL8192AC/$file/2024.10.02%20Legislative%20Finance%20Memo%20on%20BSA%20and%20Inflation%20(1).pdf)

⁴ Based on projected 2025-26 enrollment and District Adjusted ADM, as detailed in the Anchorage School District *Preliminary 2025-26 Budget*, p 19. Accessed at <https://www.asdk12.org/cms/lib/AK02207157/Centricity/Domain/1225/FY26%20Preliminary%20Budget%20Book%20for%20POSTING.pdf>

⁵ For ASD Board Policy 3000, see <https://www.boardpolicyonline.com/?b=anchorage&s=318404>

Legislative Delegation and discussed as a prerequisite for supporting a permanent increase to public education funding in this amount.⁶

Therefore, should the Legislature approve a permanent statutory increase to the Base Student Allocation of \$1,000 prior to the Anchorage School District Administration's May 15, 2025 deadline for issuing required layoff notices, the Anchorage School District Administration shall amend the 2025-26 (FY26) Financial Plan and Budget by making the investments detailed in Attachment A.

Should the Legislature approve a permanent statutory increase to the Base Student Allocation of greater than \$1,000 and thus the \$71.1 million noted here, the Board will strategically align additional revenue towards further reductions in class sizes.

⁶ See Alaska Legislature House Floor Session 02/19/2024, Timestamp 02:08:23
(<https://www.ktoo.org/video/gavel/house-floor-session-2025021174/?eventID=2025021174>)

Attachment A to AO 2025-29(S)

Jacobs/Lessens Amendment #1: Attachment A

Revenue assumption: a \$1,000 increase per pupil through the formula (BSA) will produce \$71.1m in new revenue for ASD

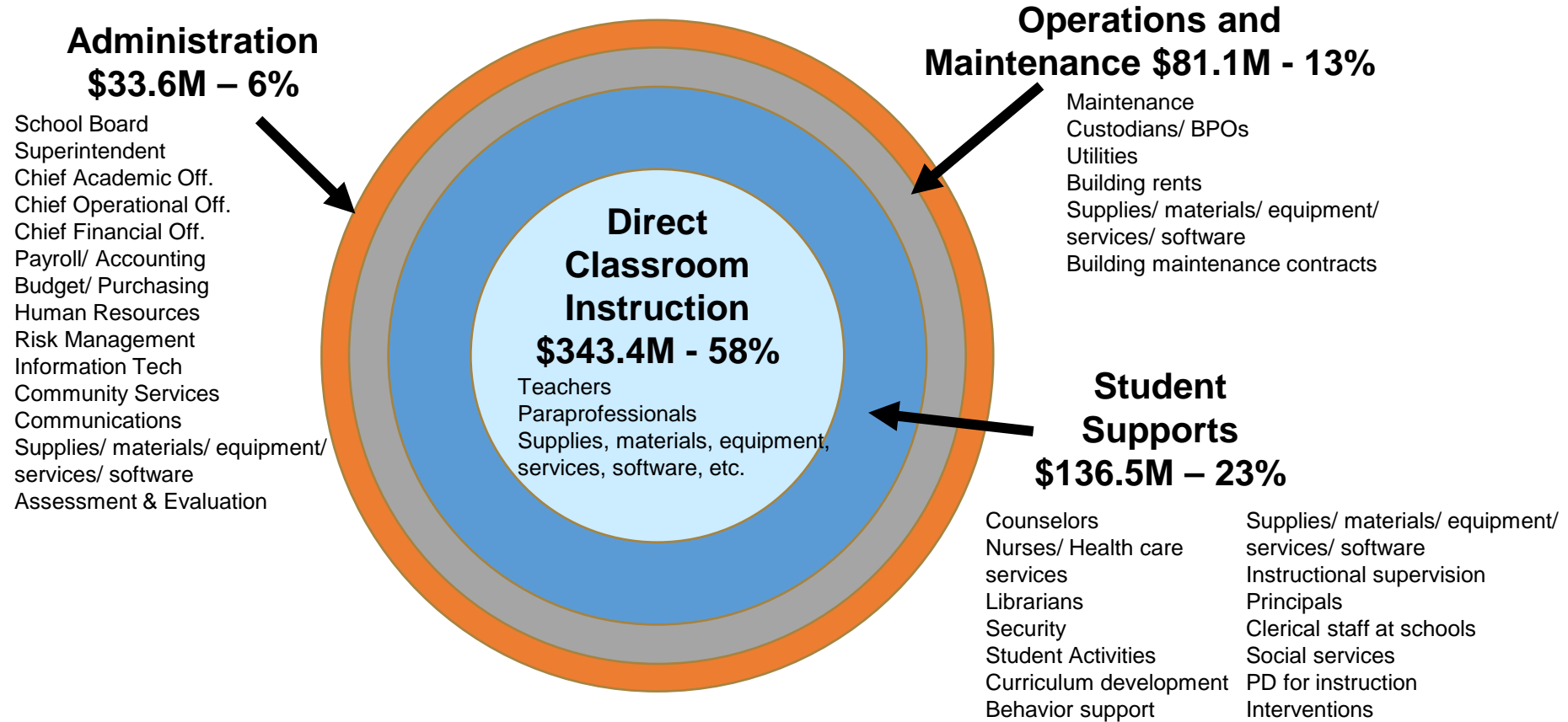
Description	FTE	Cost	Category
Reverse proposed K-12 PTR +4 for FY26	195.40	\$ 24,742,000	Instruction
Revert K-12 PTR to FY16 levels	142.00	18,400,000	Instruction
Charter school additional funding	0.00	4,000,000	Instruction
Invest in high dose reading / math tutoring for students assessed as below/well-below proficiency in grades 4-12	31.70	4,000,000	Instruction
Reverse cuts to Gifted program including IGNITE and testing teachers	23.90	3,049,000	Instruction
Reverse proposed cuts to holdback teachers	16.00	2,056,000	Instruction
Reverse cuts to Special Ed Elementary School (-1 technical, -7.01 paraprofessionals, -8 teachers)	16.01	1,759,000	Instruction
Reverse cuts to elementary immersion school teachers	12.00	1,514,000	Instruction
Correspondence allotment increase	0.00	650,000	Instruction
Reverse cuts to Special Ed Whaley School (-1 teachers, -3 paraprofessionals, +1 behavior)	3.50	300,000	Instruction
Reverse cuts to Elementary paraprofessional educators	6.13	294,000	Instruction
Reverse proposed cuts to Elementary summer school	0.00	200,000	Instruction
Reverse cuts to preschool teachers	1.50	195,000	Instruction
Reverse proposed cuts to Elementary Battle of the Books	0.00	123,211	Instruction
Reverse cuts to Secondary summer school	0.00	102,000	Instruction
New Investments in Instruction	448.14	61,384,211	
Reverse proposed cuts to librarians	12.50	1,708,620	Instructional Support
Reverse cuts to elementary nurses	13.00	1,585,133	Instructional Support
Reverse proposed cuts to Middle school sports	0.00	1,555,000	Instructional Support
Reverse cuts to Teaching and Learning (-10 reading interventionists)	10.00	1,222,000	Instructional Support
Reverse proposed cuts to High school sports (hockey, gymnastics, swim/dive, The Dome)	0.00	1,133,000	Instructional Support
Reverse proposed cuts to principals	5.00	840,625	Instructional Support
Reverse proposed cuts to library assistants	7.87	540,000	Instructional Support
Reverse cuts to counselors	3.50	451,111	Instructional Support
Reverse cuts Special Ed Deaf (-1.75 paraprofessionals, -3 interpreters)	4.75	390,000	Instructional Support
Invest in elementary counselors in alignment with board goals/guardrails	2.50	322,600	Instructional Support
New Investments in Instructional Support	59.12	\$ 9,748,089	
Total additions if a \$1,000 BSA increase is provided	507.26	\$ 71,132,300	

School Type	FY 2025 General Fund PTR - Grade Level Groupings						
	K	1	2	3	4-5	6-8	9-12
Secondary Schools							31.25
Middle Schools							31.25
Elementary Schools	22	23	25	26	27		

School Type	FY 2026 General Fund PTR - Grade Level Groupings						
	K	1	2	3	4-5	6-8	9-12
Secondary Schools							35.25
Middle Schools							35.25
Elementary Schools	26	27	29	30	31		

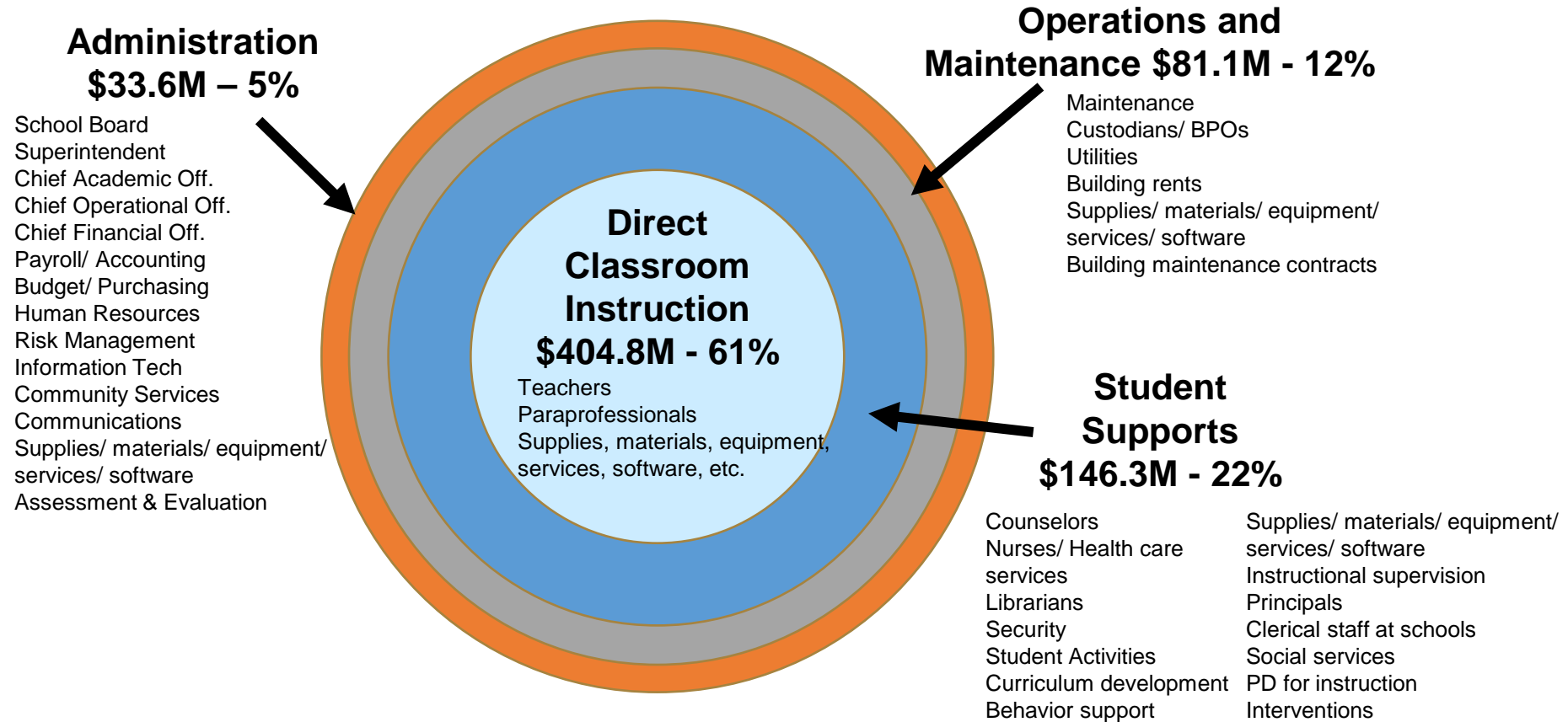
School Type	FY 2026 General Fund PTR - Grade Level Groupings (if Restored to FY16 Metric)						
	K	1	2	3	4-5	6-8	9-12
Secondary Schools							29.41
Middle Schools							27.25
Elementary Schools	20	21	24	24	26		

Budget Development – FY26 Allocations



	FY25	FY26	FY25 % of Total	FY26 % of Total
Direct Instruction	\$ 377,608,631	\$ 343,413,250	59%	58%
Student Support	141,259,637	136,528,757	22%	23%
Ops and Maintenance	82,605,045	81,053,842	13%	13%
Districtwide Administration	36,346,507	33,622,980	6%	6%
Total	\$ 637,819,820	\$ 594,618,829	100%	100%

Budget Development – FY26 Allocations with Jacobs/Lessens Amendment #1



	FY25	FY26	FY25 % of Total	FY26 % of Total
Direct Instruction	\$ 377,608,631	\$ 404,797,461	59%	61%
Student Support	141,259,637	146,276,846	22%	22%
Ops and Maintenance	82,605,045	81,053,842	13%	12%
Districtwide Administration	36,346,507	33,622,980	6%	5%
Total	\$ 637,819,820	\$ 665,751,129	100%	100%

Anchorage School District
Fiscal Year 2025-2026

PROJECTED REVENUES AND EXPENDITURES SUMMARY

Fund	Revenues and Fund Balance				2025-2026 Revenue/Source Projections	2025-2026 Expenditure Projections
	Local	State		Federal		
	Taxes	Other				
General Fund	\$ 225,508,510	\$ 60,447,497	\$ 291,587,410	\$ 17,075,412	\$ 594,618,829	\$ 594,618,829
Project Carryover		30,000,000			30,000,000	30,000,000
Transportation Fund	12,925,975		19,333,747		32,259,722	32,259,722
Local, State and Federal Grants Fund		1,402,864	6,988,422	83,287,034	91,678,320	91,678,320
Debt Service Fund	28,907,739	4,197,644	14,209,070		47,314,453	47,314,453
Capital Projects Fund		33,297,768			33,297,768	33,297,768
Student Nutrition Fund		3,890,998	-	25,289,866	29,180,864	29,180,864
Student Activities Fund		7,900,000			7,900,000	7,900,000
ASD Managed Total	<u>267,342,224</u>	<u>141,136,771</u>	<u>332,118,649</u>	<u>125,652,312</u>	<u>866,249,956</u>	<u>866,249,956</u>
SOA PERS/TRS On-behalf			50,000,000		50,000,000	50,000,000
TOTAL	<u>\$ 267,342,224</u>	<u>\$ 141,136,771</u>	<u>\$ 382,118,649</u>	<u>\$ 125,652,312</u>	<u>\$ 916,249,956</u>	<u>\$ 916,249,956</u>
Percentage of Revenue Sources to Total Revenue Projections	29.18%	15.40%	41.71%	13.71%	100.00%	

Computation of Total Taxes
for Calendar Year 2025

		General and Transportation Funds	Debt Service Fund
Amount required to fund second half of Adopted FY 2024-2025 Budget: January 1, 2025-June 30, 2025	\$ 131,972,386	\$ 114,916,173	\$ 17,056,213
Amount required to fund first half of Adopted FY 2025-2026 Budget: July 1, 2025-December 31, 2025	\$ 133,671,113	<u>119,217,243</u>	<u>14,453,870</u>
TOTAL Taxes for Calendar Year 2025		<u>\$ 234,133,416</u>	<u>\$ 31,510,083</u>
Total Taxes for Calendar Year 2025			
<u>Total Taxes 2025</u>	\$ 265,643,499 = 6.714 mills	\$ 234,133,416	\$ 31,510,083
Assessed Valuation	\$ 39,564,689,895	\$ 39,564,689,895	\$ 39,564,689,895
		<u>5.918 mills</u>	<u>0.796 mills</u>

Appendix E

Anchorage School District
Fiscal Year 2025-2026

COMPUTATION OF MUNICIPAL PROPERTY TAX LIMITATION

		<u>Charter Limit</u>
Taxes Projected – Anchorage School District FY 2024-2025		\$ 263,944,771
Less: Prior Year Taxes Required for Debt Service		<u>34,112,425</u>
Net Taxes Approved for General and Transportation Funds		229,832,346
<u>Allowable Growth Factors</u>		
Population – 5 year Average	-0.4%	
CPI – 5 average year Anchorage Urban	<u>3.0%</u>	
	2.6%	<u>5,975,641</u>
Basic Tax Limitation		235,807,987
<u>Plus Exclusions:</u>		
Judgments/Legal Settlements		-
Taxes for Operations and Maintenance on New Voter Approved Facilities		-
Taxes Requested on New Construction/Property Improvements		<u>2,626,498</u> [1]
Tax Limitation – General Fund		238,434,485
Taxes Requested for Debt Service		<u>28,907,739</u>
Tax Limitation FY 2025-2026		267,342,224
General and Transportation Funds	238,434,485	
Debt Service Fund	<u>28,907,739</u>	
Taxes Projected in Financial Plan – FY 2025-2026		<u>267,342,224</u>
Amount Over (Under) as allowed by the Property Tax Cap Limitation under the MOA Charter		<u>\$ -</u>

[1] New construction amount taken from the Municipality of Anchorage's 2025 Proposed General Government Operating Budget.



Municipal Clerk's Office

Approved

Date: **March 24, 2026**

Submitted by: Chair of the Assembly at the request of the School Board
 Prepared by: Anchorage School District
 For reading: March 3, 2026
 (S) Submitted by: Assembly Chair Constant
 Assembly Vice Chair Brawley
 (S) Prepared by: Office of Assembly Counsel
 (S) Reviewed by: Anchorage School District
 Department of Law
 Office of Management and Budget
 (S) For reading: March 24, 2026

**ANCHORAGE, ALASKA
 AO NO. 2026-21(S)**

1 **AN ORDINANCE DETERMINING AND APPROVING THE TOTAL AMOUNT OF THE**
 2 **ANNUAL OPERATING BUDGET OF THE ANCHORAGE SCHOOL DISTRICT FOR ITS**
 3 **FISCAL YEAR 2026-2027 AND DETERMINING AND APPROPRIATING THE PORTION**
 4 **OF THE ASSEMBLY APPROVED BUDGET AMOUNT TO BE MADE AVAILABLE FROM**
 5 **LOCAL SOURCES.**

6
 7 THE ANCHORAGE ASSEMBLY ORDAINS:
 8

9 Section 1. That, subject to the contingency in Section 2 below, the FY
 10 2026-2027 Proposed Anchorage School District Financial Plan in the amount of
 11 \$870,206,954 has been approved by the Anchorage Assembly, and that[,] the amount of
 12 \$282,978,686 is to be contributed from local property taxes or other local sources and is
 13 hereby appropriated for school purposes to fund the School District for its 2026-2027 fiscal
 14 year.
 15

16 **Section 2. That both the above amounts in Section 1 are each increased**
 17 **by not to exceed \$11.8 Million, if and only if Proposition 9 on the ballot of the April 7,**
 18 **2026 regular Municipal election is passed and approved by a majority of voters voting**
 19 **on the proposition.**
 20

21 Section ~~3~~[2]. That ~~[The District is also requesting an additional]~~
 22 \$2,042,809 in local property taxes may be levied and collected in tax year 2026 and is
 23 then appropriated for the purpose of reconciling the District's FY25-26 fund balance
 24 used to pay bond debt associated with the State of Alaska's [Governor's] underfunding
 25 of State bond debt reimbursement in Fiscal Year 2025-2026, tied to bonds passed and
 26 approved by the voters in and prior to 2015. This amount is not included in Section 1.
 27

28 Section ~~4~~[3]. That this ordinance is effective upon passage and approval.
 29

30 PASSED AND APPROVED by the Anchorage Assembly, this 24th day of March, 2026.
 31

32

33 _____
 34 Chair

34 ATTEST:

35

36 _____
 37 Municipal Clerk
 38

MUNICIPALITY OF ANCHORAGE

ASSEMBLY MEMORANDUM

AM No. 76-2026

Meeting Date: March 3, 2026

FROM: ANCHORAGE SCHOOL DISTRICT

SUBJECT: AO 2026-21 ANCHORAGE SCHOOL DISTRICT
FY 2026-2027 FINANCIAL PLAN

PROPOSED FINANCIAL PLAN

The Anchorage School Board has approved the Proposed Financial Plan and Budget for FY 2026-27 in the amount of \$870,206,954. The total proposed Anchorage School District budget by individual fund is projected as follows:

Municipal Upper Limit Summary

Governmental Funds Summary (in millions \$)	Actual [1]	Actual [1]	Actuals [1]	Adopted	Proposed	FY26 Adopted vs.	
	FY 2022-23	FY 2023-24	FY 2024-25	Budget	Budget	FY27 Proposed	
				FY 2025-26	FY 2026-27	\$	%
General Fund	\$ 517.874	\$ 622.972	\$ 661.895	\$ 644.431	\$ 604.541	\$ (39.890)	-6.2%
Project Carryover [2]	-	-	-	30.000	30.000	-	0.0%
Transportation Fund	25.389	30.509	31.693	34.171	33.634	(0.537)	-1.6%
Grants Fund	135.958	89.298	68.518	91.677	90.176	(1.501)	-1.6%
Debt Service Fund	70.752	62.135	54.248	47.314	49.145	1.831	3.9%
Capital Projects Fund [3]	11.854	21.320	36.611	31.386	25.538	(5.848)	-18.6%
Student Nutrition Fund	22.200	23.789	24.457	29.181	29.273	0.092	0.3%
Student Activities Fund	5.718	5.817	6.359	7.900	7.900	-	0.0%
ASD Managed Total	789.745	855.840	883.781	916.062	870.207	(45.855)	-5.0%
SOA PERS/TRS On-behalf	33.951	36.302	46.920	50.000	50.000	-	0.0%
Total All Funds	\$ 823.696	\$ 892.142	\$ 930.701	\$ 966.062	\$ 920.207	\$ (45.855)	-4.7%

The upper limit spending authorization of \$870,206,954 for FY 2026-27, is a decrease of \$45,855,219 from the prior year. The overall decrease in upper limit spending is primarily due to a loss in local revenues, primarily fund balance, resulting in a decrease in General Fund revenue and expenditures.

It is requested that the Anchorage Assembly approve local property taxes in the amount of \$282,978,686, an increase of \$15,636,462 from the prior year, or about 5.8 percent. The tax increase is primarily due to the increase to the required local contribution as a result of the increase to the 2025 Anchorage property full value determination and increases in Debt repayment. The change in taxes by type is shown in the table below:

1

	FY 2025-26	FY 2026-27	\$ Change	% Change
Anchorage Property Values	\$48,188,712,215	\$52,425,374,890	\$ 4,236,662,675	8.79%
Required Local Contribution	127,700,087	138,927,243	11,227,156	8.79%
Additional Local Contribution	97,808,423	96,272,498	(1,535,925)	-1.57%
Transportation	12,925,975	12,925,975	-	0.00%
Debt Service	28,907,739	34,852,970	5,945,231	20.57%
TOTAL Local Support	\$ 267,342,224	\$ 282,978,686	\$ 15,636,462	5.85%

2

3

4

PROPERTY TAXES AND ENROLLMENT

5

6

The chart below shows the amount of taxes the District is requesting by both fiscal year (FY), which is July 1 through June 30, and calendar year (CY). Fiscal year taxes are collected over the course of two calendar years, e.g. the second half of the FY 26 tax request (January 1, 2026 – June 30, 2026) and the first half of the FY 27 tax request (July 1, 2026 – December 31, 2026) makes up the total calendar year 2026 request.

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FY 2026-27 Proposed Budget Property Tax Request

	Approved Budget FY 2025-2026	Proposed Budget FY 2026-2027	Increase/ (Decrease)	Percent Change
Total Property Taxes (FY)	267,342,224	282,978,686	15,636,462	5.85%
Total Property Taxes (CY)	265,643,499	275,160,456	9,516,957	3.58%
Estimated Assessed Valuation (CY)	39,564,689,895	39,564,689,895	-	0.00%
Estimated Mill Rate (CY)	6.71	6.96	0.25	3.73%

13

14

15

Taxes requested for ongoing operations are expected to increase by 3.58 percent for calendar year 2026, and the overall tax burden and mill rates are set to increase by 3.73 percent for the year.¹

16

17

18

Calendar Year Request with Unfunded Bond Debt

	Approved Budget FY 2025-2026	Proposed Budget FY 2026-2027	Increase/ (Decrease)	Percent Change
Total Property Taxes (CY)	265,643,499	275,160,456	9,516,957	3.58%
Unfunded Bond Debt for FY27	-	2,042,809	2,042,809	100.00%
Total Calendar Year Request	265,643,499	277,203,265	11,559,766	4.35%
Estimated Mill Rate (CY)	6.71	7.01	0.30	4.47%

19

20

¹ At the time of budget development, estimated assessed valuation was pending. This will be updated in March per the municipal assessor.

1 Due to the State of Alaska underfunding the School Bond Debt Reimbursement
 2 program for all Alaska districts in FY 2025-26, The District is requesting \$2.04
 3 million to cover the remaining shortfall after approximately \$2.36 million has been
 4 applied to the \$4.4 million unfunded amount.

5
 6 Enrollment is expected to decrease in average daily membership of 4.35 percent.
 7 The total projected District enrollment is shown below:
 8

	Actual FY 2025-2026	Projected FY 2026-2027	Increase/ (Decrease)	Percent Change
Average Daily Membership	41,168	40,988	(180)	-0.44%
Students with Intensive Needs	1,154	1,154	-	0.00%

9
 10
 11 Additional information regarding changes in revenue and expenditures specific
 12 to each fund, as well as programmatic and staffing changes specific to academic
 13 programs and support services, can be found in the budget document.
 14

15 The FY 2026-27 Proposed Financial Plan and Budget continues the Anchorage
 16 School Board’s commitment to improving the education of all students.
 17

18 **The Anchorage School District requests the full support of the Anchorage**
 19 **Assembly for this budget and in the ongoing efforts to continue a community**
 20 **dialogue that focuses on building on the momentum ASD has achieved.**
 21
 22
 23

24 Respectfully submitted,



25
 26
 27
 28 Dr. Jharrett Bryantt
 29 Superintendent
 30

31 JB/AR
 32

33 Attachments include:

34
 35 February 24, 2026 Preliminary Budget Memo
 36

37 Comb Bound / PDF Proposed FY 2026-27 Budget under separate cover.



Agenda Item Details

Meeting	Feb 24, 2026 - School Board Special Meeting
Category	E. Action Items
Subject	3. ASD Memorandum #131 - FY 2026-2027 Preliminary Financial Plan and Budget (Second Reading)
Type	Action
Recommended Action	To approve the fiscal year 2026-2027 Preliminary Budget and authorize an upper limit spending authority of \$ 867,286,954.

ANCHORAGE SCHOOL DISTRICT
ANCHORAGE, ALASKA

ASD MEMORANDUM #131 (2025-2026)

FEBRUARY 24, 2026

TO: SCHOOL BOARD

FROM: DR. JHARRETT BRYANTT, SUPERINTENDENT

SUBJECT: FY 2026-27 PRELIMINARY FINANCIAL PLAN AND BUDGET

ASD Core Value: *The District will be open, transparent and accountable to the public.*

RECOMMENDATION:

It is the Administration’s recommendation that the School Board approve the fiscal year 2026-2027 Preliminary Budget and authorize an upper limit spending authority of \$ 867,286,954.

PERTINENT FACTS:

Consistent with the upper limit budget set in the District’s pro forma financial planning and updated revenue projections, the total Anchorage School District managed funds for FY 2026-27 is \$867.287 million, or about 5.3 percent below the prior year. Including State of Alaska on-behalf payments, the total for all funds is \$917.287 million, a 5 percent decrease from FY 2025-26. The following table shows the upper limit authority requested for each fund:

Municipal Upper Limit Summary

Governmental Funds Summary
(in millions \$)

	Actual [1]	Actual [1]	Actuals [1]	Adopted	Preliminary	FY26 Adopted vs.	
	FY 2022-23	FY 2023-24	FY 2024-25	Budget	Budget	FY27 Preliminary	
	\$	\$	\$	\$	\$	\$	%
General Fund	\$ 517,874	\$ 622,972	\$ 661,895	\$ 644,431	\$ 601,621	\$ (42,810)	-6.6%
Project Carryover [2]	-	-	-	30,000	30,000	-	0.0%
Transportation Fund	25,389	30,509	31,693	34,171	33,634	(537)	-1.6%
Grants Fund	135,958	89,298	68,518	91,677	90,176	(1,501)	-1.6%
Debt Service Fund	70,752	62,135	54,248	47,814	49,145	1,331	3.9%
Capital Projects Fund [3]	11,854	21,320	36,611	31,386	25,538	(5,848)	-18.6%
Student Nutrition Fund	22,200	23,789	24,457	29,181	29,273	0,092	0.3%
Student Activities Fund	5,718	5,817	6,359	7,900	7,900	-	0.0%
ASD Managed Total	789,745	855,840	883,781	916,062	867,287	(48,775)	-5.3%
SO A PERS/ TRS On-behalf	33,951	36,302	46,920	50,000	50,000	-	0.0%
Total All Funds	\$ 823,696	\$ 892,142	\$ 930,701	\$ 966,062	\$ 917,287	\$ (48,775)	-5.0%

[1] GAAP basis expenditures with on-behalf pension payments removed from individual funds

[2] Accounting practice for transparency and efficiency only - no additional funding

[3] Capital Projects includes capital Legislative grants and General Fund contribution for only voter approved bond projects that are repaid through debt service have been excluded

PROGRAM CHANGES:

The Administration is also proposing programmatic changes that will result in substantive impacts to the District’s instructional programs and services, as follows:

- The Administration is recommending moving the Montessori program at Tudor Elementary School to Denali Montessori and Tudor Elementary would become a neighborhood only school.
- The Administration is recommending moving the Government Hill Elementary neighborhood students to Inlet View Elementary School and Government Hill would become a Spanish Immersion Alternative School.
- The Administration is recommending the Outreach program, currently located at Whaley be moved to Benny Benson and SAVE Alternative schools.

FUNDING AUTHORIZATION:

This preliminary budget includes planned fund balance usage that requires additional action of the Board to authorize changes in two areas and/or exceeds the administrative transfer authority for the following:

- Authorizing the release of encumbered funding in the current year’s budget that was previously authorized by the Board for specific uses in accordance with Government Accounting Standards Board (GASB) Statement No. 54 *Fund Balance Reporting and Governmental Fund Type Definitions.*, as follows:
 - 2018 Earthquake Recovery - \$277,083
 - 6th Grade to Middle School Move - \$242,251
- Release encumbrances for prior year projects and cancellation of other miscellaneous planned purchases by recommendation of District leadership including software upgrades, curriculum, contingencies for emergent ADA projects, and other districtwide funds - \$3,741,067

Funds will be taken from the following accounts and held in a districtwide account:

Account	Description	Object	Description	Amount
101604	Labor Relations	3010	Contracted Svcs Administration	\$ 17,000
101701	DEI & Community Engagement	3010	Contracted Svcs Administration	16,134
101901	Project Management	3080	Contracted Svcs Buildings	360,457
102801	Teaching & Learning	5400	Expendable Equipment	3,000
102809	Teaching & Learning	4020	Textbooks	266,577
102819	Teaching & Learning	3030	Contracted Svcs Instructional	35,120
102823	Teaching & Learning	4010	Office Supplies	636
103911	Information Technology	3010	Contracted Svcs Administration	27,700
103911	Information Technology	3055	Technology Maint Agreements	13,322
103913	Information Technology	3010	Contracted Svcs Administration	9,797
103913	Information Technology	3055	Technology Maint Agreements	22,551
103914	Information Technology	3055	Technology Maint Agreements	1,342,574
103915	Information Technology	3055	Technology Maint Agreements	808,417
103916	Information Technology	3010	Contracted Svcs Administration	15,575
103916	Information Technology	3055	Technology Maint Agreements	35,461
109901	Fixed Charges General Fund	3980	Unallocated Adjustments	200,000
109940	DW Earthquake O&M	3080	Contracted Svcs Buildings	277,083
109947	Middle School Move Ops & Maint	3080	Contracted Svcs Buildings	153,339
109947	Middle School Move Ops & Maint	3980	Unallocated Adjustments	88,912
148901	Summer School Elem Reg Instr	3980	Unallocated Adjustments	66,746
159901	Unallocated Charter School	3980	Unallocated Adjustments	500,000
Total				\$ 4,260,401

Additional information regarding changes in revenue and expenditures specific to each fund can be found in the budget document as well as programmatic and staffing changes specific to academic programs and support services.

Once the FY 2026-27 Preliminary Budget is approved, it will become the Proposed Budget and is submitted to the Anchorage Assembly no later than the first Monday in March.

After Assembly approval and the Legislative session has concluded, the District will finalize the Adopted Budget, incorporating any changes made by those entities and approved by the School Board, if necessary.

Attachment – FY 2026-27 Preliminary Budget Book

JB/JA/SG/ML/ML/MJT/AR

Prepared by: Andy Ratliff, Chief Financial Officer

Approved by: Jim Anderson, Chief Operating Officer
 Sven Gustafson, Chief Academic Officer
 Marty Lang, Chief Human Resource Officer
 Mike Fleckenstein, Chief Information Officer
 MJ Thim, Chief of Staff

[M131A - REV1 FY2027 Preliminary Budget Book.pdf \(97,881 KB\)](#)

[M131B - FTE History by Admin Department FY12 to FY27.pdf \(91 KB\)](#)

[M131C - FTE History by State Function FY12 to FY27.pdf \(104 KB\)](#)

[M131D - FY27 Preliminary Elementary School Teachers.pdf \(69 KB\)](#)

[M131E - FY27 Preliminary Secondary and Alternative School Teachers.pdf \(67 KB\)](#)

[26.2.11 Levy Amendment Language.pdf \(146 KB\)](#)

[Donley Memo #131 Amendment 1 Sports Restoration.pdf \(100 KB\)](#)

[Donley Memo #131 Amendment 2 IGNITE Restoration.pdf \(90 KB\)](#)

[Donley Memo #131 Amendment 3 Reduction of 510 and 550.pdf \(87 KB\)](#)

[Donley Memo #131 Amendment 4 Office of Equity.pdf \(56 KB\)](#)

[Donley Memo #131 Amendment 5 Reduction in APs revised.pdf \(76 KB\)](#)

[Jacobs_Lessens Memo #131 Amendment 2.pdf \(89 KB\)](#)

[Lessens Memo #131 Amendment 1.pdf \(77 KB\)](#)

[Donley Memo #131 Amendment 6 Restore Lake Otis Elementry.pdf \(60 KB\)](#)

[Donley Memo #131 Amendment 7 Restore Campbell STEM Elementry.pdf \(84 KB\)](#)

[Donley Memo #131 Amendment 8 Restore Campbell STEM - Alternative.pdf \(58 KB\)](#)

[Donley Memo #131 Amendment 9 Restore Fire Lake.pdf \(58 KB\)](#)

[4. Jacobs_Lessens Memo # 131 Amendment 2 revised.pdf \(87 KB\)](#)

[Jacobs_Lessens Memo #131 Amendment 1 REVISED.pdf \(144 KB\)](#)

Motion & Voting

Amendment #2: I move Lessens/Jacobs Amendment 1, To amend the Preliminary FY27 Budget (ASD Memorandum #131) to utilize the savings captured from adoption of ASD Memorandum #137 (ASD Rightsizing), to restore \$3.16M toward Middle and High School sports and activities. In addition, utilize \$2.2M to restore 16 teacher FTE at the Middle School level, and to restore 6.5 Nurse FTE.

Motion by Kelly Lessens, second by Carl Jacobs.

Final Resolution: Motion Passes

Yea: Margo Bellamy, Dave Donley, Pat Higgins, Carl Jacobs, Kelly Lessens, Dora Wilson, Andy Holleman

Main Motion as Amended: To approve the fiscal year 2026-2027 Preliminary Budget and authorize an upper limit spending authority of \$ 867,286,954.

Motion by Margo Bellamy, second by Andy Holleman.

Final Resolution: Motion Passes

Yea: Margo Bellamy, Pat Higgins, Carl Jacobs, Kelly Lessens, Dora Wilson

Nay: Dave Donley, Andy Holleman

§



MUNICIPALITY OF ANCHORAGE ASSEMBLY MEMORANDUM

No. AM 169-2026

Meeting Date: March 24, 2026

1 **From: Assembly Chair Constant and Vice Chair Brawley**

2
3 **Subject: AO 2026-21(S): AN ORDINANCE DETERMINING AND**
4 **APPROVING THE TOTAL AMOUNT OF THE ANNUAL OPERATING BUDGET**
5 **OF THE ANCHORAGE SCHOOL DISTRICT FOR ITS FISCAL YEAR 2026-2027**
6 **AND DETERMINING AND APPROPRIATING THE PORTION OF THE**
7 **ASSEMBLY APPROVED BUDGET AMOUNT TO BE MADE AVAILABLE FROM**
8 **LOCAL SOURCES.**

9
10
11 This proposed (S) version of the ordinance does two things: first it conditionally adds
12 the Proposition 9 special tax levy for school operations to the FY 2026-2027
13 Proposed Anchorage School District Financial Plan, and secondly authorizes taxes
14 to be collected to reconcile the fund balance for debt service for the District's FY25-
15 26 budget.

16
17 **1. Proposition 9 special property tax levy.** With the passage of AO 2026-14,
18 As Amended, the Anchorage Assembly sent Proposition 9 to the voters to
19 ask for approval of a one-time special property tax levy to raise not to exceed
20 \$11.8 Million for the School District operations costs. The circumstances
21 creating the impetus for Proposition 9 are detailed in AM 39-2026
22 accompanying that ordinance. Presently, it is up to the voters to approve
23 Proposition 9, and the April 7 election results are expected to be certified at
24 the Assembly's regular meeting on April 28. However, for budget purposes,
25 the potential \$11.8M is a known, definite number and it is appropriate and
26 efficient to include it as an increase to the ASD's requested budget total
27 amount and amount to be contributed from local sources contingent on
28 certification of the election results showing approval of Proposition 9, and
29 appropriate to the District if and when it becomes available. The new Section
30 2 of the (S) version does exactly that. The Anchorage School Board's
31 Finance Committee Amendment #1, attached hereto, addresses this and
32 commits the special tax levy revenue, if approved by the voters, to "reduce
33 the projected FY27 increase in the District's K-12 Pupil Teacher Ratio from a
34 +4 to a +2 by retaining 80 K-12 classroom teacher[s] and 3.44 Kindergarten
35 paraprofessional positions."

36
37 **2. \$2M to cover State unfunded debt service payments.** This change is
38 responsive to the original AO 2026-21 Section 2 request from the School
39 Board to include authorization and appropriation of approximately \$2 Million
40 in local property taxes for debt service payments associated with bond
41 propositions approved in 2015 and prior years. That includes debt service
42 payments for bonds authorized by ballot propositions in 2007, 2008, and

1 2011 to 2015, which each set out the bond amount, the percent of them that
 2 qualified for State debt reimbursement for school bonds, and the
 3 authorization and costs in taxes with and without State debt reimbursement.
 4 The State of Alaska underfunded the School Bond Debt Reimbursement
 5 program for all school districts across the state in FY25-26, with Anchorage
 6 being shorted about \$4.4 Million. The District's limited fund balance covers
 7 some, but is unable to cover just over \$2 Million of that amount.¹ The District
 8 made the payments, resulting in negative fund balance and this request will
 9 reconcile it to balance the FY25-26 budget with a tax year 2026 levy and
 10 collection. The levy should be included along with the school levy necessary
 11 for Section 1 when the Assembly sets mill rates in late April or early May.
 12

13 The increases herein would require a conforming amendment in pages of the ASD
 14 Proposed Budget and Handbook, including Appendices, to incorporate the
 15 increased numbers in the (S) version, and it is anticipated the ASD Administration
 16 will do so and create an approved Budget book.
 17

18 **We request your support for the (S) version of the ordinance.**
 19

20 Prepared by: Office of Assembly Counsel
 21

22 Respectfully submitted: Christopher Constant, Assembly Chair
 23 District 1 – North Anchorage
 24

25 Anna Brawley, Assembly Vice Chair
 26 District 3 – West Anchorage
 27

28 Attachments: Anchorage School Board Finance Committee Amendment #1
 29

¹ See Anchorage School District FY 2026-2027 Preliminary Budget Book, p. 51, available at
[https://go.boarddocs.com/ak/asdk12/Board.nsf/files/DRFU6V7A91A1/\\$file/M131A%20-%20REV1%20FY2027%20Preliminary%20Budget%20Book.pdf](https://go.boarddocs.com/ak/asdk12/Board.nsf/files/DRFU6V7A91A1/$file/M131A%20-%20REV1%20FY2027%20Preliminary%20Budget%20Book.pdf) .

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Finance Committee Amendment #1
 AMENDMENT TO ASD MEMORANDUM #131 (2026-27):
 Fiscal Year 2026-2027 Preliminary Budget

Add the following language to ASD Memorandum #131 as guidance from the Board to the Administration to amend the 2026-27 (FY27) Financial Plan and Budget after the successful April 7, 2026 passage of Proposition 9, “Anchorage School District Operational Costs Special Property Tax Levy – 2026 Only.”

The Anchorage School Board intends for the Anchorage School District’s 2026-27 (FY 27) Financial Plan and Budget to provide the best possible learning environments for all students and to support adopted Board goals for 3rd Grade Reading Proficiency, 8th Grade Math proficiency, and high school graduation rates.

Protecting progress towards those goals for FY27 requires that the Board aligns available dollars with classroom instruction. To do so, the Preliminary Budget and Resolution 25-26-01(S.1) collectively articulate plans to spend the District’s Fund Balance down to 5%, pursue new efficiencies, consolidate schools, and implement substantial cuts to non-instructional areas (i.e. to administration, operations and maintenance, and student supports). Despite these measures, proposed instructional reductions for FY27 include the loss of 168.3 K-12 classroom teacher positions and 13.69 Kindergarten paraprofessionals due to a +4 increase in the K-12 Pupil Teacher Ratio.

On January 12, 2026, Mayor Suzanne LaFrance proposed a one-time levy “to reduce forecasted class size increases and protect essential student programs.” On January 27, 2026, the Anchorage Assembly amended and approved AO 2026-14, which placed Proposition 9 on the April 7, 2026 Municipal ballot. If voters approve that proposition, a one-time levy calculated to collect up to \$11.8 million would support funding the Anchorage School District to the maximum amount permitted by state law for this year.

Board members discussed and reviewed the origins, language, and intent of the levy during the February 12, 2026 Finance Committee meeting and supported bringing a Finance Committee amendment clarifying intended use of the levy to the full Board for consideration, which follows:

If a majority of voters approve Proposition 9 during the April 7, 2026 Municipal election, the School Board directs that the Administration shall use all available revenue from the levy to reduce the projected FY27 increase in the District’s K-12 Pupil Teacher Ratio from a +4 to a +2 by retaining 80 K-12 classroom teacher and 3.44 Kindergarten paraprofessional positions.



MUNICIPALITY OF ANCHORAGE

ASSEMBLY INFORMATION MEMORANDUM

AIM No. 34-2026

Meeting Date: March 24, 2026

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FROM: MAYOR

SUBJECT: TRANSMITTAL OF PLANNING AND ZONING COMMISSION RESOLUTION NO. 2026-015, THE ANCHORAGE SCHOOL DISTRICT SIX-YEAR CAPITAL IMPROVEMENT PLAN RECOMMENDATIONS AND ANALYSIS, JULY 1, 2026 – JUNE 30, 2032.

This AIM transmits Planning and Zoning Commission Resolution No. 2026-015, which provides the Commission’s findings and recommendation of its review of the Anchorage School District Six-Year Capital Improvement Plan (PZC Case No. 2026-0039).

Prepared by: Michael Nti Ababio, Planning Department
Approved by: Mélisa R. K. Babb, Planning Director
Concur: Robert Doehl, C&ED Director
Concur: William D. Falsey, Chief Administrative Officer
Concur: Rebecca A. Windt Pearson, Municipal Manager
Respectfully submitted: Suzanne LaFrance, Mayor

Attachment: Planning and Zoning Commission Resolution No. 2026-015

**MUNICIPALITY OF ANCHORAGE
PLANNING AND ZONING COMMISSION RESOLUTION NO. 2026-015**

A RESOLUTION RECOMMENDING APPROVAL TO THE ANCHORAGE ASSEMBLY AND THE ANCHORAGE SCHOOL BOARD OF THE ANCHORAGE SCHOOL DISTRICT SIX-YEAR CAPITAL IMPROVEMENT PLAN RECOMMENDATIONS AND ANALYSIS, JULY 1, 2026 – JUNE 30, 2032.

(Case 2026-0039)

WHEREAS, Anchorage Municipal Code section 21.02.030C.2. states that the Planning and Zoning Commission shall “review and make recommendations to the assembly and school board regarding the annual capital improvement program of the municipality and school district”; and,

WHEREAS, the Anchorage School District has prepared its annual Six-Year Capital Improvement Plan (ASD Six-Year CIP) and submitted it to the Planning and Zoning Commission; and,

WHEREAS, the ASD Six-Year CIP covers projected capital needs of the Anchorage School District from 2026 to 2032 and identifies the following: the School District’s capital facility priorities, an assessment of the conditions of existing capital facilities, current facilities utilization, a summary of space requirements, population and growth factors affecting student enrollment, and recommendations for capital improvements and deferred requirements projects; and,

WHEREAS, capital improvement programming is an integral planning and budgeting process affecting land use development and the provision of public services in conformance with the Comprehensive Plan and other adopted municipal plans.


NOW, THEREFORE, BE IT RESOLVED by the Anchorage Planning and Zoning Commission that:

- A. The Commission makes the following findings of fact:
1. Staff has reviewed the ASD Six-Year CIP and provided comments where the *Anchorage 2040 Land Use Plan* or other adopted elements of the Comprehensive Plan contain applicable policies.
 2. The projects listed in the draft ASD Six-Year CIP for 2026-2032, including its proposed capital improvement projects and deferred requirements projects, are consistent with the direction of development in the Comprehensive Plan and other adopted plans.
 3. Representatives from the Anchorage School District gave a presentation to the Commission and answered questions during a work session conducted directly before the regularly scheduled meeting.
- B. The Planning and Zoning Commission recommends to the Anchorage Assembly and the Anchorage School Board approval of the *Anchorage School District Six-Year Capital Improvement Plan Recommendations and Analysis, July 1, 2026 – June 30, 2032*.

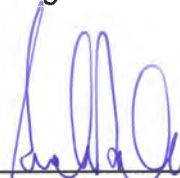
Planning and Zoning Commission
Resolution No. 2026-015
Page 2

PASSED AND APPROVED by the Anchorage Planning and Zoning Commission on the 9th day of February 2026.

ADOPTED by the Anchorage Planning and Zoning Commission this 2nd day of March 2026.



Mélisa R. K. Babb
Secretary



Andre Spinelli
Chair

(Case No. 2026-0039)

mna

MUNICIPALITY OF ANCHORAGE
ASSEMBLY INFORMATIONAL MEMORANDUM
No. AIM 44-2026



Meeting Date: March 24, 2026

From: Assembly Member Silvers

Subject: News article regarding Effects of STEM learning on students with autism spectrum disorder and students with intellectual disability: a systematic review and meta-analysis

For the Assembly’s consideration; please see the attached news article, *Effects of STEM learning on students with autism spectrum disorder and students with intellectual disability: a systematic review and meta-analysis* is provided.

The attached journal, written by *Fang Da, Ying Ma, Minjie Ma, Jieyu Mao, Zijiang Weng, Chao Yoang, & Tingzhao Wang* was originally published on *Humanities and Social Sciences Communications* section of www.nature.com website on July 4, 2025 and may be found here: www.nature.com/articles/s41599-025-05292-y

Prepared by: Jasmine Acres, Deputy Municipal Clerk
Respectfully submitted: Assembly Member Silvers -
District 5, East Anchorage

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ARTICLE


<https://doi.org/10.1057/s41599-025-05292-y>

OPEN

Effects of STEM learning on students with autism spectrum disorder and students with intellectual disability: a systematic review and meta-analysis

 Fang Da^{1,2}, Ying Ma¹, Minjie Ma³, Jieyu Mao^{1,4}, Zijiang Weng^{1,5}, Chao Yang² & Tingzhao Wang¹

Although science, technology, engineering and mathematics (STEM) education is known to benefit students with autism spectrum disorder (ASD) and students with intellectual disability (ID), its efficacy has not been fully evaluated. This systematic review and meta-analysis examined the (1) overall intervention, maintenance and generalisation effect sizes of STEM learning; (2) effectiveness of intervention methods; and (3) influence of moderating variables (age, sex, disability type, intervention setting, interventionist and intervention duration.) Based on a Web of Science search, 40 studies published between January 2010 and July 2023 were included. This study involves two distinct groups: students with ID and students with ASD. Within the ASD group, participants were subdivided into two subgroups based on comorbid ID status: ASD-ID (with comorbid ID) and ASD-no ID (without ID). STEM learning had strong overall intervention and maintenance effects on students with ID and ASD. Disability type had a moderating effect on STEM learning outcomes, students with ASD-ID having more severe impairments compared to students with ASD-no ID and those with ID alone. This study has summarised interventions suitable for different fields and types of disabilities; educators should further optimise interventions that are proven effective. Future research should continue to focus on factors affecting the STEM learning outcomes of students with ASD and students with ID to help them improve their learning experiences, better understand the world and participate in social activities.

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Introduction

Intellectual Disability (ID) and Autism Spectrum Disorder (ASD)¹ are among the most prevalent developmental disorders (Srivastava and Schwartz, 2014). Collectively, these two disorders affect 3–5% of the population, posing significant social problems across all countries (Bitsko et al., 2022). Approximately 65% of children diagnosed with ASD also have ID (Strnadová et al., 2016; Dykens and Lense, 2011). During the last decade, the growing trend of educating children with ASD and ID in inclusive classrooms has led to an increased emphasis on their academic performance and instructional approaches (Alresheed et al., 2018; Selanikyo et al., 2017). Students with these conditions often face challenges in executive functions (EF) (Roelofs et al., 2015)—higher-order cognitive processes critical for adapting to new environments (Elliott, 2003)—such as working memory deficits impairing knowledge application and limited cognitive flexibility hindering instructional adaptation (Corbett et al., 2009; Hill, 2004). These EF impairments significantly impact academic performance (Benallie et al., 2021; Matson et al., 2009) and pose challenges to school adaptation. Enriching the learning content, establishing diversified educational models and enhancing educational effectiveness for students with ASD and students with ID is crucial to ensuring educational equity in special education (Di Blasi et al., 2023). The integration of science, technology, engineering and mathematics (STEM) into K-12 and higher education curricula requires the involvement of one or more of these four disciplines (National Academy of Engineering and National Research Council, 2002), emphasising a student-centred approach to foster students' innovative thinking and scientific spirit (Breiner et al., 2012). It provides students with ASD and students with ID the opportunity to understand the world more authentically (Basham et al., 2010). These findings have important implications for special education teaching and rehabilitation training. Therefore, educators need to ask, 'What can STEM learning bring to students with ASD and students with ID and how effective is it?' This study carried out a meta-analysis to answer this question.

The Benefits of STEM learning for students with ASD and students with ID. First, the structured learning environment provided by STEM aligns with the cognitive characteristics of students with ASD and students with ID (Schreffler et al., 2019). For example, offering specific topics, clear objectives and learning content matched to students' abilities meets the learning preferences of these students regarding predictability and reduced uncertainty (Murthi et al., 2024). The interdisciplinary nature of STEM allows these students to explore and learn in various ways and better understand complex concepts (Hwang and Taylor, 2016). Such authentic experiences promote students' participation in learning rather than acquiring knowledge through isolated facts. Spooner et al. (2011) highlight the significance of discovery-based learning and naturalistic enquiry as critical components of STEM learning for students with ASD and students with ID. Engaging in enquiry behaviour and problem-solving encourages students to think actively through prediction, reasoning and questioning.

Furthermore, STEM learning also meets the social and emotional requirements of students with ASD and students with ID (Hughes et al., 2022), enhancing their emotional expression, emotional interpretation and conflict mediation skills (Hughes et al., 2022) and strengthening their academic self-concept (Ozkan and Kettler, 2022). Lastly, STEM learning has expanded employment opportunities for students with ASD and students with ID. STEM education involves all learners (National Research Council et al., 2000) and its interdisciplinary practices enable

students to acquire transferable skills, which are crucial for their employment preparation (Nachman et al., 2024; Zollman, 2012).

The practical application of intervention methods in STEM learning on students with ASD and students with ID. Over the past few years, research on STEM education for students with ASD and students with ID has largely been related to the application of teaching methods. Research indicates that a hands-on, applied and authentic approach to STEM instruction could benefit ASD or ID students (Israel et al., 2013). STEM educators have adopted innovative and engaging methods with practical implications in various real-world contexts. For example, to address students' EF deficits, educators have adopted structured teaching strategies. By transforming complex STEM skills into actionable steps through the 'problem-posing-hypothesis-testing-conclusion-evaluation' process (Wright et al., 2020), the cognitive load on ASD students is reduced.

Meanwhile, explicit instruction and systematic teaching procedures can assist ID students in breaking down tasks and by utilising tools such as visual flowcharts and operational checklists, the burden on working memory is alleviated, enabling them to effectively master STEM skills (Taylor, 2018). In addition, some researchers have adopted cooperative learning strategies to meet these students' social development needs. For example, robotics projects based on peer-mediated groups positively impact the STEM learning motivation of children are ASD, ID and other disabilities (Lindsay et al., 2019) and could promote peer relationships. Educators can employ a single intervention method, such as using prompts and video demonstrations when teaching mathematics and science to students with ASD (Hart and Whalon, 2008). Additionally, practitioners can also combine explicit instruction, time delay and technology-based interventions (Ehsan et al., 2018; Wright et al., 2020).

Research gaps. Although previous research has emphasised STEM learning benefits, students with ASD and students with ID still face challenges. Owing to struggles in both comprehension and articulation of information, as well as issues with executive function, students require adaptations when receiving instruction (Fleury et al., 2014). Notably, the heterogeneity among students with ASD, such as whether they have co-occurring ID, can lead to varying learning outcomes (Verté et al., 2006). However, some researchers focus only on 'pure autism' or idiopathic, primary, or non-syndromic autism without ID, leading to insufficient practice and research for individuals with ASD and co-occurring ID (Amaral et al., 2011; Vivanti et al., 2013). Therefore, the effectiveness of teaching STEM to students with different types of disabilities as well as the maintenance and generalisation of interventions need to be evaluated to understand their long-term effects (Iatraki and Soulis, 2021). Additionally, Knight et al. (2013a; 2013b) noted that, compared to areas like literacy, the absence of research-based interventions results in practitioners lacking confidence in teaching science and mathematics to students with ASD and students with ID, leading to a gap in the field of engineering education. To assist educators in better teaching STEM to this population, it is essential to compile applicable intervention methods and teaching strategies (Ayeni et al., 2024). Given the diverse nature of students with ASD and students with ID, many studies have focused on single-case designs (SCDs) to assess the effects of STEM learning. The number of meta-analyses of such studies is limited and it remains unclear which variables affect the effectiveness of STEM interventions. Therefore, this study assesses single-case studies of STEM learning that involve students with ID and ASD, with the ASD group further divided

into two subgroups based on whether there is comorbid ID. Therefore, the disability types included ID, ASD without ID (ASD-no ID) and ASD with ID (ASD-ID) to enable a holistic evaluation of individual study effects and the connections between distinct study attributes and their outcomes. Subsequently, the research questions (RQs) were as follows:

- (1) What are the overall interventions, maintenance and generalisation effects of STEM learning on students of ASD and ID?
- (2) What are the effective intervention methods available for STEM teaching for students with ASD and students with ID, and what impact do they have on learning outcomes?
- (3) What are the potential moderating effects of participant and intervention process characteristics on STEM learning outcomes for students with ASD and students with ID?

Methods

Data source. This study investigates SCD studies in interventions for students with ASD and students with ID. This method is ideal for establishing causal relationships in behavioural interventions through within-subject comparisons (Horner et al., 2005; Wolery and Dunlap, 2001). Nonparametric tests in SCDs can be used for meta-analysis of intervention measures (Parker and Vannest, 2009). Guided by the PRISMA-ScR checklist (Page et al., 2021), we made specific adaptations for SCDs, especially regarding standardised effect size calculations and moderator analyses of intervention processes and participant characteristics. These steps enhanced methodological transparency and result credibility in our single-case meta-analysis. The procedure involved:

- (a) formulating the RQs following the population, exposure, comparison, outcome and time format;
- (b) identifying relevant search terms and data sources;
- (c) establishing study eligibility criteria that included inclusion and exclusion stipulations and
- (d) performing a data extraction and analysis using the selected studies.

The protocol was registered in the International Prospective Register of Systematic Review Protocols (PROSPERO number: CRD42024559772). Studies were searched for and obtained from the Web of Science (WOS) database.

Search strategy. This study used the WOS core collection as the data source. Journals here are filtered by impact factors and peer reviews, aligning with the study's focus on high-quality single-case experimental design literature. The search strategy involved: First, three keyword groups '(ID* OR autism*)' (target population), '(STEM OR STEAM)' (domain) and '(learning)' (context)—were combined using Boolean operators (AND), yielding 134 initial studies. Second, we expanded and refined applied semantics. STEM was decomposed into subfields 'Science*', 'Technology*', 'Engineer*', 'Math*' and terms such as 'STEM education' and 'STEAM education' were added. Educational context keywords were expanded to include synonyms like 'instruction'. By setting the publication date from January 1, 2010, to July 31, 2023 and selecting articles, we obtained 1225 studies. Additionally, a reference search was conducted for review articles relevant to the topic, adding five articles totalling 1230.

Eligibility criteria. Articles were included if they (Fig. 1)

- (a) were published in English in peer-reviewed articles;
- (b) had an experimental design;
- (c) had a single-case research design;

- (d) had participants diagnosed with ASD or who received special education classification for autism (i.e. ASD, pervasive developmental disorder, Asperger's syndrome) or ID (i.e. mental retardation; Prader-Willi, Down's, Williams, or Rett syndromes).
- (e) had participants aged five to 22 years within the K12 educational system, including those enrolled in public or private schools (i.e. elementary, middle, or high school, or transition programmes funded by schools), with the oldest age (22 years) being for students in transition programmes funded by schools or the government;
- (f) focused on at least one STEM-related skill or content as a dependent variable (including research that investigated comprehension skills or vocabulary within a STEM field, e.g. understanding scientific texts).
- (g) included specific RQs, research methods, detailed intervention processes, systematic data collection and analysis, conclusions and
- (h) provided adequate information to calculate the effect sizes.

Data extraction and descriptive coding

Independent variables. In this study, the independent variable was a STEM teaching intervention method (Table 1). Based on the screening results, this study coded this using task analysis, which used self-monitoring checklists and general terms for enquiry-based tasks. The coding results were as follows: computer-assisted instruction (CAI), systematic instruction combined with other strategies, simultaneous prompting (SP), video prompting (VP), explicit instruction combined with other strategies, modified schema-based instruction, schema-based instruction, video modelling (VM), video self-modelling (VSM), constant time delay, cognitive and metacognitive and virtual abstract instructional sequence (VA).

Dependent variables. First, this study categorised STEM intervention goals into four domains: science, technology, mathematics and STEM interdisciplinary areas (Table 1). Due to the absence of relevant studies in the engineering domain, variables related to the engineering field were excluded from the analysis.

Second, this study classified STEM intervention goals into five categories:

- (1) science ideas and core knowledge,
- (2) science enquiry skills,
- (3) computer programming skills,
- (4) mathematics problem-solving skills and
- (5) STEM skills.

Prior research has classified understanding of science texts (Williams et al., 2009), science vocabulary (Jimenez et al., 2009), science content knowledge (Knight et al., 2012) and other skills as science concepts and core knowledge within the science field. Science enquiry involves hands-on practice and problem-solving skills (National Research Council, 1996). Therefore, this study categorised scientific content and problem-solving as science enquiry skills. As computer science and technology include computer and coding programming (Karp and Maloney, 2013), this study included programming skills in the technology field. Mathematics knowledge comprises conceptual understanding and procedural skills (Rittle-Johnson, 2017), where conceptual understanding describes students' comprehension of the underlying mathematical principles or relationships within the learned concepts. Procedural understanding or skills pertain to the methodical undertaking of projected procedures and accomplishing the essential steps for computation (Rittle-Johnson and Schneider, 2014). Hence, this study involved measuring ideas and

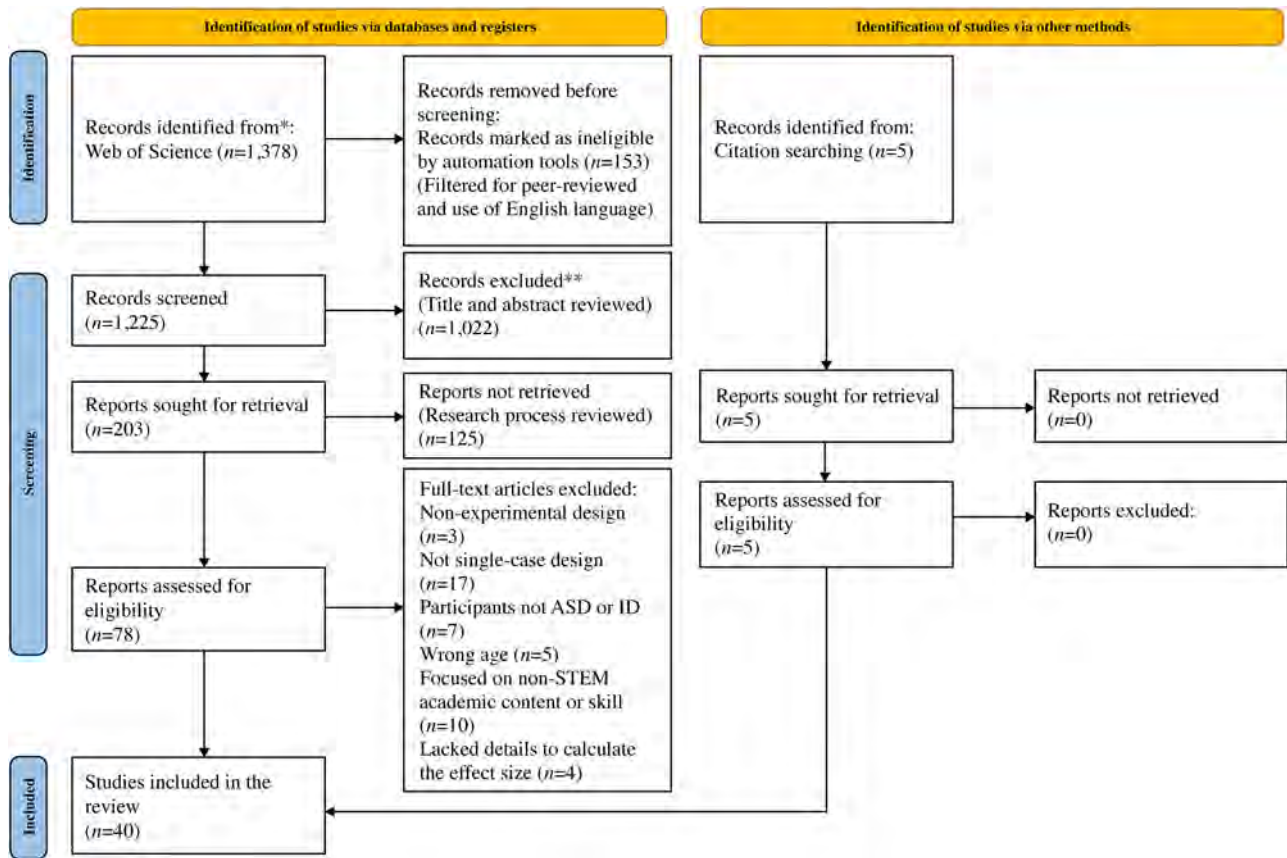


Fig. 1 This study’s flow diagram based on PRISMA 2020. *When feasible, this study reported the number of records identified from each database or register searched (rather than the total number across all databases or registers.) **If automation tools were used, this study indicated how many records were excluded by a human and automation tool, respectively (Page et al., 2021).

Table 1 Examples of variables.		
Name	Type	Operational Definition
STEM teaching intervention methods	Independent variables	Methods used in implementing STEM teaching for students with ASD and students with ID (e.g. CAI, VM/VSM, VP).
STEM intervention goals	Dependent variables	The intervention goals in the four STEM domains are classified into five categories: science ideas and core knowledge, science enquiry skills, computer programming skills, mathematics problem-solving skills and STEM skills.
Participants’ characteristics and intervention processes	Moderating variables	Participants’ characteristics included sex, age and disability type. Intervention processes included the interventionists, settings and duration.

STEM science, technology, engineering and mathematics, CAI computer-assisted instruction, VM/VSM video modelling/video self-modelling, VP video prompting.

identifying geometric shapes as mathematical concepts and core knowledge skills and categorised price comparison, addition, subtraction, fractions and other calculation-related problem-solving abilities as computational problem-solving skills (Jitendra et al., 2016). These studies refer to a collective term for skills involving interdisciplinary knowledge in science, technology and mathematics (National Science Foundation: Division of Science Resources Statistics, 2004).

Moderating variables. First, participants’ characteristics included sex, age and disability type (Table 1). The participants were students in public or private schools (i.e. elementary, middle, high schools, or transition programmes funded by schools and the government.) Our study focuses on K-12 students (ages 5–22), including those in transition programmes (19+), as mandated by the U.S. Individuals with Disabilities Education Act requiring

special education support through Individualized Education Programmes (IEPs). Extended schooling under IEPs accommodates diverse cognitive needs, with interventions primarily within K-12. Age was divided into the following groups: 5–6 years (early childhood), 7–12 years (childhood), 13–18 years (adolescence) and 19–22 years (adulthood). The participants included ID and ASD, with the ASD group further divided into two subgroups based on whether there is comorbid ID. Therefore, the disability types included ID, ASD without ID (ASD-no ID) and ASD with ID (ASD-ID).

Second, the intervention processes included the interventionists, settings and duration. Intervention frequency was not a moderating variable because of differences across STEM areas. Interventionists referred to personnel who implemented the intervention processes, including special education and general teachers, parents, professionals and multi-person collaborations. The intervention settings

included special education classrooms, inclusive and general classrooms, resource rooms and centres and homes (refers explicitly to the use of summer vacation, afterschool hours, or other free time by students in public or private schools to receive interventions in a home setting), other locations (e.g. libraries and therapy rooms) and common school areas.

Quality rating of the studies. This study used What Works Clearinghouse design standards and Reichow et al.'s (2008) evaluation criteria to examine the methodological rigour and overall quality of the included studies, the robustness of evidence for specific interventions and whether they qualified as evidence-based practices for individuals with ASD and ID. This approach evaluated the studies based on 12 quality indicators comprising six primary factors (participant characteristics, independent variables, baseline conditions, dependent variables, visual analysis and experimental controls) and six secondary factors (inter-observer agreement [IOA], kappa, blind raters, fidelity, follow-up conditions and social validity).

The studies were evaluated using the primary quality indicators and categorised as 'high', 'acceptable', or 'unacceptable'. Then, this study considered the presence of the secondary quality indicators, with the studies being classified based on whether there was 'evidence' or 'no evidence' for these aspects. Based on WWC standards and Reichow et al.'s (2008) evaluation criteria, a study was categorised as strongly rigorous if it achieved high scores for all primary factors and presented evidence of three or more secondary quality factors. Adequate rigour was assigned to a study if it scored highly on a minimum of four of the six primary factors, had no unacceptable ratings and demonstrated at least two secondary quality factors. Weak rigour was assigned if a study scored highly on fewer than four primary quality factors or received unacceptable ratings. Among the 40 included studies, 17, 21 and 2 had strong, adequate and weak rigour, respectively. Rockwell et al. (2011) and Kasap and Ergenekon (2017) were downgraded due to insufficient high-scoring core criteria (2/6, 3/6) and failure to meet the strong rigour (≥ 4 high-scoring criteria). Despite limited explanatory power, these studies remain representative in the field. To ensure comprehensive evidence, all 40 studies were included in the final analysis.

Single-case risk of bias tool. This study used the single-case risk of bias (SCRoB) tool to identify potential bias sources that could result in overestimation or underestimation of intervention effects. It codes for nine categories (Reichow et al., 2018): sequence generation, participant selection, blinding participants and personnel, procedural fidelity, blinding outcome assessors, selective outcome reporting, dependent variable reliability, data sampling and other sources of potential bias. Each study was reviewed and categorised as having a high, low, or unclear risk of bias under four broad categories: selection, performance, detection and other sources. Two primary authors independently evaluated all studies through dual-blind coding based on operational definitions of SCRoB's nine domains and criteria for risk classification. A pilot assessment of 5 studies ensured criterion alignment prior to formal evaluation. Discrepancies were resolved through consensus discussions, with unresolved cases arbitrated by a third author.

Coding reliability. This study reviewed and assigned codes to each included study in the following areas: (a) participant demographics, including sex, age and grade level; (b) intervention process details (e.g. setting, intervention and duration); (c) STEM-related skills; (d) intervention methodology; (e) research design; (f) procedural fidelity; (g) efficacy; and (h) social validity. Unclear, missing, or unreported information in each study was

identified and coded. The first, second and third authors independently assessed all the randomly selected studies (100%). A total of 560 items (14 coding items across 40 studies) were used to code the variables for each study. The authors determined inter-rater reliability by comparing the agreements and disagreements between the coders. The process entailed dividing the exact agreements by the total count of agreements and disagreements and multiplying the result by 100. Prior to formal coding, the researchers validated the coding framework through pilot coding of 5 preliminary studies (pre-test IOA = 91.4%). The final coding phase achieved an overall IOA of 93.57%, ranging from 90.04% to 97.1%. All discrepancies were resolved using a consensus-based approach, where the three coders discussed and reconciled differences until unanimous agreement was reached for subsequent analyses (Supplementary Tables S1 and S2).

Statistical analyses. A nonoverlapping Tau-U calculator (Parker et al., 2011) was used to compute each study's effect size calculations and confidence interval (CI) estimates. Tau and Ta-U have stronger statistical power than other nonoverlapping indices and could control for the influence of baseline and intervention period trends on the results. The Tau and Ta-U values ranged from -1 to 1 , with values of $0.93 >$ indicating strong effectiveness, $0.82-0.92$ indicating high effectiveness, $0.66-0.81$ indicating moderate effectiveness, $0.48-0.65$ indicating weak effectiveness and <0.47 indicating no effectiveness. Based on existing meta-analyses, the overall generalisation and maintenance effect sizes used a 95% CI (Hong et al., 2016; Pan et al., 2023). This study independently coded the included studies and calculated the effect sizes; the Tau and Ta-U consistencies were 91.57%.

Most meta-analyses exclude SCDs (Allison and Gorman, 1993). A meta-analysis of 375 studies examined the outcomes of psychological therapy. It only included studies with at least one treatment group compared to a control group (Smith and Glass, 1977). Single-case studies are often excluded from meta-analyses, although they show meaningful variations. Therefore, this study searched the literature and summarised the methods for meta-analyses applicable to SCDs to ensure statistical significance. Schenker and Gentleman (2001) pointed out that judging the significance of differences by examining the overlap of 95% confidence intervals (CIs) leads to an overly low Type I error rate. Knol et al. (2011) validated this conclusion, finding that the actual error rate of the overlap test using 95% CIs was only 0.0056, far below the conventionally expected 0.05. Payton et al. (2003) further demonstrated that using 95% CIs yields overly conservative results and when standard errors are approximately equal, closer to 84% size for the intervals would give an approximate $\alpha = 0.05$ test. Subsequent studies, such as Ninci et al. (2020), adopted 95% CIs to evaluate main effects in a meta-analysis of single-case research on embedding interests for individuals with ASD, while using 83.4% CIs to interpret non-overlapping effects in forest plots for moderator analyses. Huang et al. (2023) and Tang et al. (2023), in single-case meta-analyses, utilised 85% CIs to balance statistical rigour and sensitivity. Building on these approaches, this study retains 95% CIs for overall effect evaluations and employs 85% CIs for nonoverlapping tests of moderator variables, thereby balancing Type I error control with the nonparametric nature of single-case data. As the Tau-U values had nonparametric properties, to ensure the statistical significance of the results, a lack of overlap in the 85% CI of the moderating variables indicated a difference. This study used a one-way analysis of variance and the Kruskal-Wallis test (Kruskal and Wallis, 1952) using the SPSS software. Following this, inter-group differences were integrated to interpret the moderating effects of variables.

Results

Study characteristics. This meta-analysis included 40 studies, with 138 intervention effect sizes, 46 generalisation effect sizes and 103 maintenance effect sizes. Regarding the experimental design paradigms, all 40 studies used SCD. These included multiple probes across participants; behaviours, skills and units ($n = 30$); multiple baselines across participants ($n = 5$); an alternating treatment design ($n = 1$); a changing criterion design ($n = 1$); and a reversal design ($n = 3$). Concerning the reliability and validity of the studies, 38 reported an IOA score above 85%, 37 reported a fidelity of intervention implementation score above 90% and 28 reported a high social validity of the research through feedback from participants and stakeholders (Supplementary Table S1).

Overall effect sizes. The overall intervention effect size (Table 2) for the 40 studies was 0.928, indicating an impact. Thirty studies reported extremely robust results. Notably, the effect size of the 18 studies was one. In addition, four studies had high effects, four had medium effects, one had a weak effect and one had no effect. All 40 included studies contained intervention effect data and were included in subsequent analyses, with no studies excluded.

Regarding the maintenance effect size (Table 2), the overall score across 29 studies was 0.901, indicating a strong overall effect. Specifically, 23 studies demonstrated strong effects, with 20 studies having a maintenance effect score of one, two (highly effective), three (moderately effective) and one (showing no effect).

Regarding the generalisation effect size (Table 2), the score across 14 studies was 0.787, suggesting a medium overall effect. Notably, five studies displayed strong effects, two had an effect value of one, five showed moderate effects, five demonstrated weak effects and one showed no effect. In summary, STEM learning for students with ID and ASD showed high overall intervention effects, highly effective maintenance effects and moderate generalisation effects (Table 2).

Among STEM disciplines (Fig. 2), mathematics studies had the highest representation, followed by science. In contrast, technology and interdisciplinary studies had less representation, whereas engineering had no representation. The STEM domains had strong to extremely strong intervention effects, with the technology domain showing the highest score (1), followed by scientific enquiry skills (strong: 0.98), solving computation-related problems (strong: 0.959), mathematics (0.95), mathematical concepts and core knowledge (high: 0.903) and science

concepts and core knowledge (high: 0.858). The interdisciplinary STEM domain had a high intervention effect (0.878).

Effect size analysis of the STEM intervention methods. The meta-analysis included 138 independent intervention effect sizes. Table 3 shows that the effect sizes of STEM intervention methods ranged from medium to extraordinarily strong. Specifically, studies adopting enquiry-based task analyses in the science domain showed a robust effect score (0.982) and no overlap in the 85% CI compared with the CAI, SP and systematic teaching intervention methods. In the technology domain, the combined use of VP and explicit teaching demonstrated the most significant effect (effect score of one). Similarly, in mathematics, studies combining explicit instruction with other strategies and cognitive and metacognitive approaches showed the most substantial impact (effect score of one). Notably, the effect size of systematic teaching did not overlap with that of the VM or VSM approaches (85% CI). Finally, in interdisciplinary STEM areas, SP prompting had a substantial effect size (0.878).

Some intervention methods show slightly different effects among students with different types of disabilities (Fig. 3). Explicit instruction, MSBI/SBI and VM/VSM have been used in students with the three types of disabilities, producing extremely strong intervention effects. Task analysis demonstrates extremely strong intervention effects in ASD-no ID and ID students. The use of CAI in students with ASD-no ID shows extremely strong intervention effects (effect size of 1), but the effectiveness is moderate in students with ASD-ID (effect size of 0.688). VP demonstrates extremely strong effect sizes in both ASD-no ID and ID students (0.973; 0.980), but the intervention effect is moderate in students with ASD-ID (effect size of 0.708).

Effect analysis of the moderating variables. The moderating variables comprised the participants' characteristics and STEM intervention processes (Fig. 4). Due to the absence of information from certain studies, the overall number of moderating variables fell short of the total independent effect sizes.

Participants' characteristics. The meta-analysis results (Fig. 4) revealed that sex did not affect STEM intervention outcomes; over half of the participants were male. Overall, the interventions were effective, with a particularly strong effect on females. Interventions were effective for those aged 5–6, 13–18 and 19 years and older and highly effective for those aged seven to 12. There were no substantial differences in the effectiveness among the different age groups. The three disability types showed distinct differences, as evidenced by the nonoverlapping 85% CI and p -value (0.002) in the Kruskal–Wallis test. This review suggested that the disability type moderated the efficacy of STEM interventions. The inter-group comparison results showed differences between ID and ASD-ID ($p = 0.026$) and between ASD-no ID and ASD-ID ($p < 0.001$). The science domain showed no overlap in the 85% CI between the ASD-no ID and the ASD-ID groups. The interventions were strongly effective for ASD-no ID and ID in mathematics and highly effective in ASD-ID. The technology

	K	TAU	P	CI 95%
Intervention	138	0.928	<0.001	[0.897, 0.959]
Generalisation	47	0.787	<0.001	[0.706, 0.869]
Maintenance	92	0.901	<0.001	[0.830, 0.971]

CI confidence interval, K number of effect sizes.

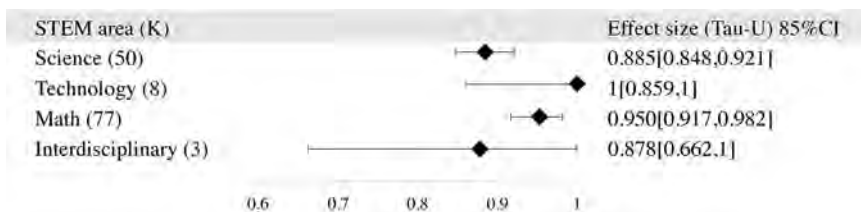


Fig. 2 Forest plot of intervention efficacy in the STEM domains. CI confidence interval, K number of effect sizes.

Table 3 Effect sizes of the science, technology, engineering and mathematical intervention methods.

Intervention method	Science			Technology			Mathematics			Interdisciplinary		
	K	TAU	85% CI	K	TAU	85% CI	K	TAU	85% CI	K	TAU	85% CI
Task analysis	17	0.982	[0.971, 0.993]	-	-	-	-	-	-	-	-	-
CAI	10	0.816	[0.692, 0.940]	-	-	-	-	-	-	-	-	-
SP	7	0.874	[0.820, 0.928]	-	-	-	-	-	-	3	0.878	[0.662, 1]
Systematic instruction	16	0.832	[0.764, 0.900]	-	-	-	10	0.872	[0.815, 0.928]	-	-	-
VP	-	-	-	3	1	[0.788, 1]	14	0.857	[0.679, 1.036]	-	-	-
Explicit instruction	-	-	-	5	1	[0.816, 1]	3	1	[0.846, 1]	-	-	-
MSBI/SBI	-	-	-	-	-	-	26	0.990	[0.980, 1]	-	-	-
VM/VSM	-	-	-	-	-	-	17	0.993	[0.987, 0.999]	-	-	-
Cognitive and meta-cognitive	-	-	-	-	-	-	3	1	[0.718, 1]	-	-	-
VA	-	-	-	-	-	-	4	0.942	[0.691, 1]	-	-	-

CAI computer-assisted instruction, CI confidence interval, MSBI/SBI modified schema-based instruction/schema-based instruction, K number of effect sizes, STEM science, technology, engineering and mathematics, SP simultaneous prompting, VM/VSM video modelling/video self-modelling, VP video prompting, VA virtual-abstract instructional sequence.

domain showed an effect size of one for all three disability types and only students with ID participated in the interdisciplinary STEM aspect (Table 4).

Setting and interventionist characteristics. The intervention settings, interventionists and intervention duration results (Fig. 4) showed no differences. The classroom and centre (setting) intervention results were effective. In contrast, interventions that occurred in other settings were effective, with no differences between the different intervention settings. About half of the interventionists were professional researchers with an extremely strong effect. Collaborative interventions between special education teachers, general and special education teachers and parents were highly effective; there were no differences among the different interventionists. The intervention duration results demonstrated high to extremely strong effectiveness with no differences.

Risk of bias. Supplementary Table S2 presents the bias risk assessment outcomes for the studies. All included single-case studies demonstrated substantial bias levels for two subcategories: blinding participants and personnel and blinding outcome assessors. This type of bias is common in SCD due to the nature of these studies, which often involve small sample sizes and flexible experimental designs (Reichow et al., 2018). The lack of blinding can introduce performance bias and detection bias, potentially affecting the internal validity of the results. The dependent variable reliability category showed low bias in all studies. For procedural fidelity and selective outcome-reporting categories, 32 of the 40 studies exhibited low bias for procedural fidelity and selective outcome-reporting categories. The other sources of bias showed considerable variability, presenting high, unclear and low bias risks across the studies.

Discussion

Effectiveness of STEM learning. This study analysed the overall intervention, maintenance and generalisation effects of STEM learning on students with ASD and students with ID (RQ1). The results showed that the overall intervention and maintenance effects were extremely strong, which aligned with Wright’s (2020) results. None of the included studies demonstrated a high risk of bias in participant sampling, dependent variable reliability, procedural fidelity, or data collection factors. Each factor belonged to the single-case research domain directly associated with contemporary single-case research design standards. However, the generalisation effect was moderate, which could be due to difficulties in the cognitive and EF of individuals with ID and ASD (Gunning et al., 2019). Cognitive flexibility deficits, a core feature of executive dysfunction, may impede cross-situational skill transfer (Benallie et al. 2021). In this study, two interventions—CAI and VSM—demonstrated optimal generalisation efficacy (Tau-U = 1). Multisensory inputs (visual, auditory and tactile) augmented information encoding efficiency by activating distributed neural regions, including the visual cortex and PFC (Shams and Seitz, 2008). Real-time feedback mechanisms (e.g. VSM’s self-review and CAI’s error correction) combined with task variability prevented rote memorisation. Structured supports (e.g. visual cues and procedural scaffolding) mitigated cognitive flexibility deficits in ASD and ID learners while reducing working memory load (Leung and Zakzanis, 2014). By simulating real-world scenarios (VSM) and embedding lifelike problem-solving (CAI), these methods improve skill transfer through contextual variety. These mechanisms likely underlie the superior generalisation effects observed. Educators need to conduct longitudinal studies to examine the long-term effects of STEM learning and

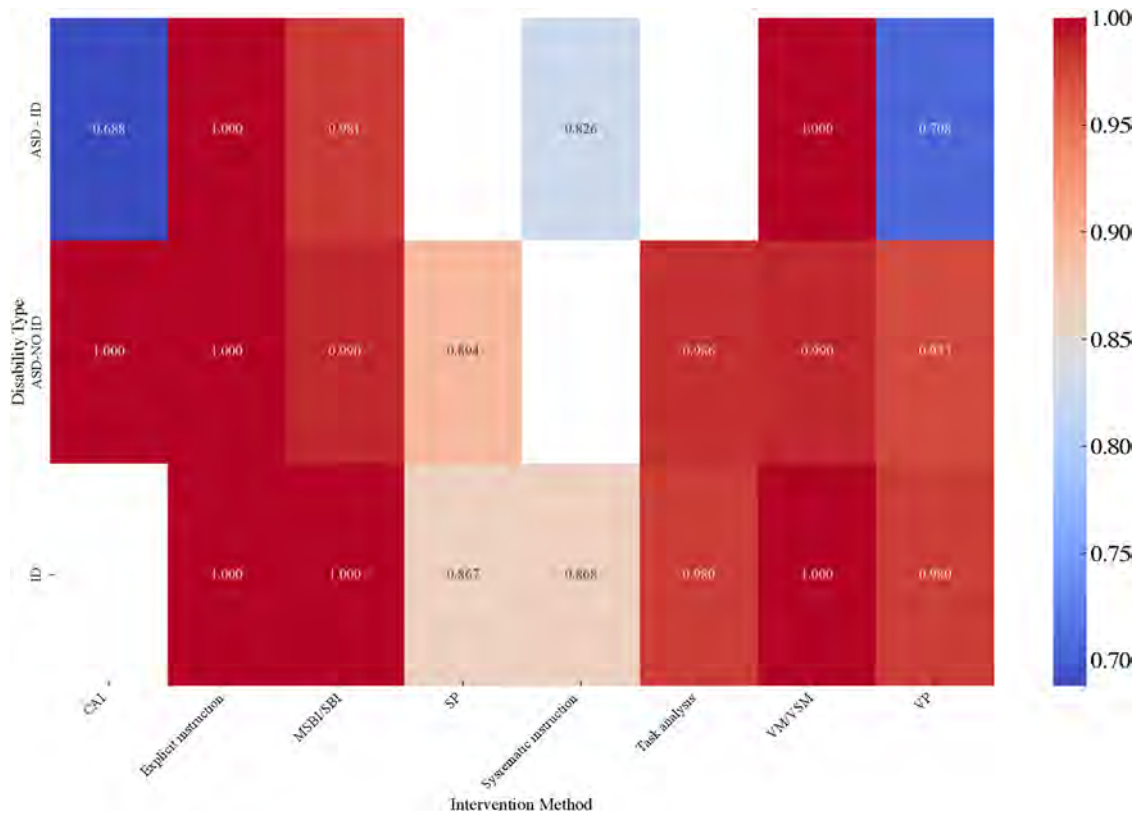


Fig. 3 Heatmap of effect sizes of disability type and intervention methods. ASD autism spectrum disorder, ID intellectual disability, ASD-ID ASD with ID, ASD-no ID ASD without ID.

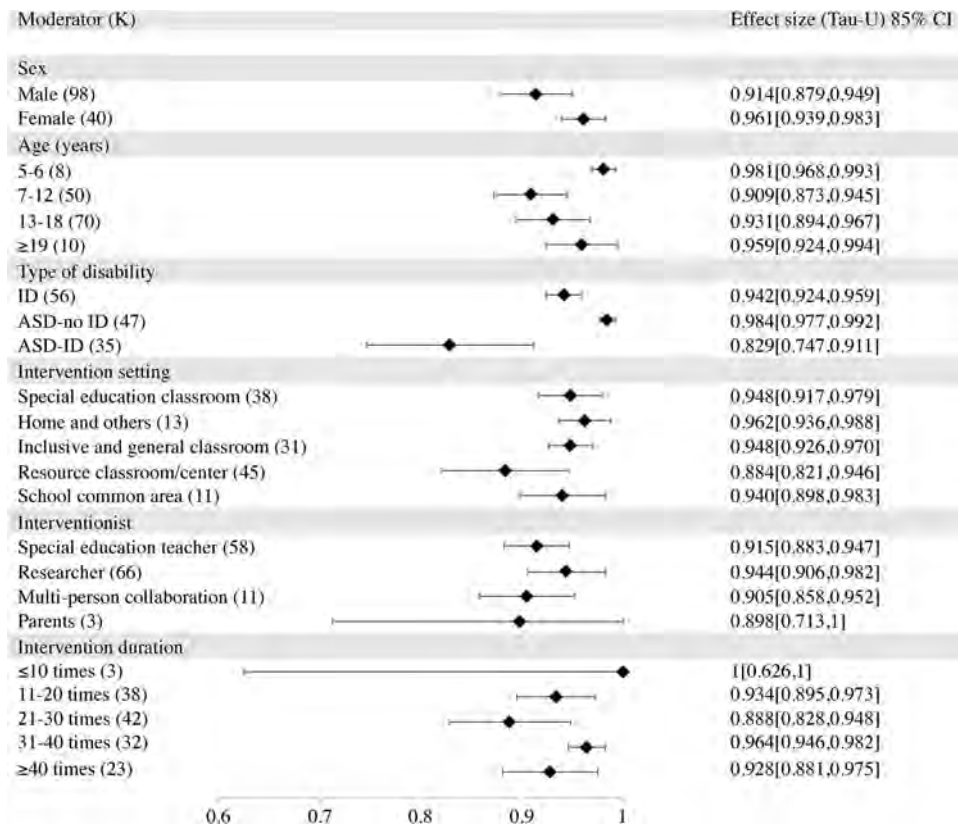


Fig. 4 Forest plot of moderating variables. CI confidence interval, K number of effect sizes, ASD autism spectrum disorder, ID intellectual disability, ASD-ID ASD with comorbid ID, ASD-no ID ASD without ID.

Table 4 Effect sizes of disability type.

Disability type	Science			Technology			Mathematics			Interdisciplinary			Sig.
	K	TAU	85%CI	K	TAU	85%CI	K	TAU	85% CI	K	TAU	85% CI	
ID	20	0.927	[0.896, 0.957]	2	1	[0.691, 1]	31	0.954	[0.931, 0.977]	3	0.878	[0.662, 1]	$P = 0.002$
ASD-no ID	14	0.969	[0.948, 0.990]	3	1	[0.796, 1]	30	0.990	[0.983, 0.996]	-	-	-	
ASD-ID	16	0.759	[0.664, 0.854]	3	1	[0.788, 1]	16	0.867	[0.712, 1.023]	-	-	-	

ASD autism spectrum disorder, ID intellectual disability, ASD-ID ASD comorbid with ID, ASD-no ID ASD without ID, K number of effect sizes.

continue to explore effective ways to enhance the generalisation skills of ASD and ID students.

Existing meta-analyses demonstrate that STEM interventions for K12 students (non-ASD/ID students) typically exhibit moderate-to-large effect sizes based on parametric measures such as Hedges' g , with interdisciplinary approaches showing significantly greater efficacy than single-discipline interventions (Zhou et al., 2024). Utilising Tau-U nonparametric effect sizes, this study reveals distinct learning outcome patterns in students with ASD and students with ID: the technology had the best effect size, science and interdisciplinary domains had high effect sizes and mathematics had an extremely high effect size. Notably, all studies in the technology domain predominantly employed robotics as instructional tools, demonstrating unique advantages. For instance, Diehl et al. (2012) observed that children with ASD exhibit heightened reliance on robotic platforms due to their repetitive and predictable learning environments, which mitigate social communication barriers. Yuen et al. (2014) further demonstrated that robot-assisted STEM group activities, through structured task decomposition and predictable procedural behaviours, effectively compensate for deficits in executive functioning and working memory, thereby enhancing exploratory behaviours, collaborative skills and programming competencies in ASD learners. Thus, the structured, low-social-pressure pedagogical approaches mediated by robotics appear to align with the cognitive and behavioural profiles of ASD or ID students (Kotsi et al., 2025), addressing learning barriers inherent in conventional settings. However, there are few studies in this field and the robustness of the intervention effect requires further verification. Future efforts should explore integrating multimodal affective recognition and natural language processing technologies (Pérez et al., 2024) to enhance robotic adaptability for ASD and ID learners. Additionally, the engineering domain has not yet generated quantifiable evidence. This disciplinary imbalance suggests that future research should explore engineering practices tailored to students with ASD and students with ID.

Among STEM-related skills, coding skills had the best intervention effect, with an effect size score of one. In addition, the intervention effects on science enquiry and mathematics problem-solving skills were extremely strong. Scientific enquiry helps students solve scientific problems and fosters a scientific spirit. Brigham et al. (2011) and Simpkins et al. (2009) affirm this view by stating that cooperative scientific enquiry activities could enhance students' engagement with learning difficulties and facilitate their conceptual understanding and academic achievement progress. In addition, enquiry-based learning helps cultivate the scientific spirit of students with ID (Al-Ahmadi and Oraif, 2009). In mathematics, developing problem-solving skills can enable students to address calculation-related challenges more effectively (e.g. addition and subtraction, price comparisons and fractions.) Studies have shown that developing and applying problem-solving skills could help students with ID and ASD to understand academic knowledge principles (Jitendra et al., 2016). In addition, Archer and Hughes (2011) believe that problem-

solving skills could help students generalise and apply mathematical skills to the real world. These results aligned with the current study and indicated that enquiry and problem-solving skills were the core features of STEM education and effective learning approaches. Based on these findings, we suggest that teachers can design cooperative enquiry activities to not only enhance the interdisciplinary knowledge understanding of students with ASD and students with ID but also cultivate their problem-solving skills and foster a scientific spirit.

Effectiveness of STEM intervention methods

Science domain: interventions using step-process-task enquiry methods. This study reviewed and evaluated the effectiveness of STEM intervention methods (RQ2). Interventions using step-process-task enquiry methods were the most effective. These methods provide students with checklists containing task steps or processes to reduce their cognitive load, better guide them in understanding science content through enquiry activities (Miller, 2012) and enhance their problem-solving, self-determination and communication skills (Wehmeyer et al., 2000). For example, students could use self-monitoring checklists for science enquiry activities (Miller, 2015) and verbally express their steps to complete self-assessments. This study's results indicated that students with moderate ID not only generalised the steps of enquiry-based problem-solving to use in everyday problem-solving situations but also showed improved independence in problem-solving. Therefore, designing task analysis lists is particularly important for the smooth completion of scientific enquiry. In practical teaching, teachers first need to break down activities into operable steps and provide students with judgement options, such as observing whether an experiment is complete and what should follow. This approach helps students better understand what they are currently doing and what tasks they are about to complete, allowing them to progress systematically. Furthermore, instructions should be clear to ensure they do not increase the students' reading load.

Technology domain: VP and explicit instruction integrated with other strategies. The results revealed that the optimal intervention methods were VP and explicit instruction, integrated with other strategies. However, there are only three studies in the technical domain, with limited intervention methods identified and the robustness of these interventions requires further exploration. The VP method breaks down a task or skill into individual steps, where participants watch video demonstrations to complete operational steps, similar to the task analysis nature of STEM activities (Banda and Dogoe, 2011). Wright et al. (2021) used the VP method to teach coding skills to students with ASD, where the teachers pre-recorded example videos and the participants completed tasks on iPads after watching them. This study's results indicated that the VP intervention method helped students with ASD generalise new skills. Although the current study did not track the long-term effects of skill generalisation. Given the

differences among students with ASD and students with ID, varying reinforcement frequencies and video types may be necessary to maintain skill stability and generalisation, which should be a key focus of future research. The study's findings offer valuable insights for teachers in STEM instruction. The demand for producing high-quality videos may heighten teachers' technophobia (Knight et al., 2018). To address this, schools can expand video resource libraries by having technical staff and researchers collaborate with special education teachers. They can prepare video models in advance based on students' IEP needs, reducing teachers' technical burden. Also, schools should strengthen technical training for educators, such as AI-assisted video production (generating task scripts of proper length, multimodal conversion with text or images) and video editing skills. VP implementation should integrate evidence-based practices (e.g. gestural cues, verbal prompts, behaviour reinforcement.) Such multimodal interactions improve student engagement and offer actionable STEM teaching frameworks for special educators, ensuring intervention feasibility and sustainability.

Explicit instruction combines direct instruction with scaffolding and feedback from students and teachers (Doabler and Fien, 2013). These instructions could help students with ID acquire self-determination and problem-solving skills related to the STEM curriculum through the coding process (Bers et al., 2014). For example, interventionists could use blocks with images or colours to demonstrate the coding processes to students (e.g. a forward arrow indicating forward movement or a red arrow indicating stopping.) Teachers use visual supports and provide detailed explanations during demonstrations, followed by guided practice for students, asking questions and offering immediate feedback. This method may include allowing students to write simple code under the teacher's guidance and gradually increasing the difficulty. As students gain proficiency with basic coding, support is gradually reduced, allowing students to attempt to write and test code independently. The results showed that this modified constructionist approach has achieved significant results in programming education for students with ID, effectively demonstrating the shift from teacher-led to student-centred learning. Teachers maintain students' learning flow by adjusting the difficulty level, promoting optimal engagement and active participation. Future explicit instruction can expand STEM applications via AI-driven adaptive systems and AR. AI systems analyse learning data in real-time, adjusting task difficulty and offering instant feedback, aligning with the 'fading guidance' principle (Veinott, 2022). AR reduces cognitive load with visual scaffolds, aiding intuitive understanding of abstract concepts (Suzuki et al., 2024). AI-integrated systems auto-detect knowledge gaps and optimise feedback (Guo et al., 2024). Future hybrid models combining explicit instruction with AR simulations for coding practice with AI-generated hints and error reports show promise. These technologies preserve explicit instruction's core advantages and offer new applications, better meeting the needs of students with ASD and students with ID to enhance their STEM learning outcomes.

Mathematics domain: cognitive and meta-cognitive approach and explicit instruction integrated with other strategies. The results showed that the optimal intervention methods integrated cognitive and metacognitive approaches and explicit instructions with other pedagogical approaches. Cognitive and metacognitive tactics assist students in executing physical tasks and cognitive processes (e.g. planning, memorising and self-assessing.) Schaefer Whitby (2013) exemplified this method by implementing the 'Solve it!' programme that provided tailored instructional materials for students with executive function impairments to enhance their attention, memory, sequencing and organisational skills

using mathematical word problems. The specific procedure involves the teacher presenting pre-recorded videos to the students, who practice according to the K-N-W-S (Know-Need-How-Strategy) approach. Meanwhile, the teacher moves around to answer questions, provide feedback, correct misunderstandings and manage behaviour. After a period, the students cease watching the videos and independently solve problems using the above method. This structured teaching method has successfully transformed video scaffolding into internal mental tools, which align with the executive function deficits of students with ASD and students with ID. It reduces students' cognitive load and provides a generalisable methodology for students to solve problems independently. In practical teaching, teachers should also be proficient in the methods of producing and using learning materials.

This study's explicit instruction comprised three phases: skill modelling, guided practice and independent skill assessment. This method is similar to Liu et al. (2023), who combined explicit instruction and VM to facilitate students' task analysis on tablet devices, thus elucidating the problem-solving procedure. Meanwhile, if students with ASD and students with ID faced uncertainty during the tasks, the facilitators sequentially provided verbal cues, specific prompts and model demonstrations. This approach was in line with the cognitive traits of ASD students; it eased their load on perceptual reasoning and working memory (Oswald et al., 2016) and facilitated their independent comprehension of measurement concepts. This method embodies the integration of structured teaching and personalised learning. AR technology vividly demonstrates the process of solving mathematical problems, including analysing the problem, demonstrating solution steps, deriving the final answer and enhancing students' learning experience. As students master the strategies, teachers gradually reduce guidance, allowing students to attempt to solve problems independently, promoting the generalisation and maintenance of skills. This approach requires teachers to be proficient in the use of digital technology and learn to create rich, interactive teaching scenarios that make abstract concepts more intuitive and understandable. In addition, teachers can also utilise intelligent teaching systems to provide personalised resources and feedback based on students' progress and needs, thereby enhancing teaching effectiveness.

Interdisciplinary domain: cooperative learning combined with SP. Only one study combined a cooperative learning strategy with the SP procedure to instruct students with moderate ID on STEM interdisciplinary content and chained tasks. The SP method simultaneously presents attention and controlling prompts to determine whether students have mastered the target skill. Heinrich et al. (2016) focused on using technological interventions to execute discrete tasks, including gaining knowledge about online publishing and sequential tasks (e.g. Internet searches). The special education teacher provided students with a folder containing their daily assignments, including worksheets for chained tasks and index cards for discrete tasks. When teaching a discrete skill, the instructor presented an attention cue, waited for the students' response and then presented the task directions, followed by a controlling prompt, similar to a verbal model. Aykut et al. (2012) suggested that the SP procedure was a brief yet effective instructional strategy to maintain students' attention and ensure more efficient mastery of STEM skills. In addition to academic skills, interdisciplinary learning content can extend to the humanities. Future attention can also be given to developing social domains, such as cooperation, communication, respect for others' ideas and other social skills. These skills are crucial for students with ASD and students with ID in terms of social adaptation and relationship building. In the interdisciplinary

field, educators can explore other interdisciplinary approaches to integrate knowledge and skills from different subjects into teaching, providing a more comprehensive learning experience for those individuals. Moreover, educators can also try to combine peer cooperation with other teaching strategies to enhance students' social interaction and collaboration skills. When students collaborate independently, teachers should promptly reinforce positive behaviours, teach them to express their needs correctly using language and use appropriate behaviours to help peers and initiate and maintain conversations.

The results indicate that explicit instruction, MSBI/SBI and VM/VSM demonstrate extremely strong application effects across the three types of disabilities and task analysis is suitable for students with ASD and students with ID. Some intervention methods demonstrate varying effects on students with different types of disabilities. For example, CAI has different performances, possibly because students with ASD may have a stronger response to visual media, making CAI a promising teaching method (Sansosti et al., 2015). Compared to students with only ASD, students with ASD-ID typically exhibit more pronounced impairments in attention, visual perception and EF (Lin et al., 2024), which may affect the effectiveness of CAI. The intervention effects of VP in students with ASD-no ID and ID can reach a very high level, but the effects in students with ASD-ID are moderate.

Similarly, Video-Based Intervention (VBI) methods like VM/VSM can achieve extremely high levels of intervention for students with all three types of disabilities. This outcome may be because VP is often used as a direct prompting tool, playing videos of specific behaviours to guide learners to imitate them, focusing more on prompting and guidance (Park et al., 2019). Subsequently, VM/VSM is a more comprehensive learning strategy, emphasising the learning process (Delano, 2007). VM not only demonstrates behaviours but also includes learning time. Video models can be peers, learners, or adults, helping learners better understand and practice target behaviours (Stierle et al., 2023). Studies have demonstrated that when intervening with students with ASD and students with ID, using VM results in fewer errors in target skills, better generalisation, easier transfer to new environments and longer-lasting behaviour compared to VP (Thomas et al., 2020). The effectiveness of STEM intervention methods varies due to the diversity of disabilities. The cognitive characteristics and learning needs are different, especially for students with ASD-ID who face the challenges of both types of disorders. Given this, in future STEM teaching, educators should deeply understand the individual characteristics and learning needs of each student, choose intervention methods that match them and further promote and optimise the better-performing interventions to seek greater teaching benefits.

In addition, peer collaboration might increase students' social contact across various activities and inclusive settings and provide them with heightened social support behaviours, broader friendship networks and more enduring peer relationships (Kennedy et al., 1997). However, owing to the limited number of available studies, the resilience of the intervention examined in this study requires further validation.

Impact of the moderating variables on STEM learning effectiveness. The RQ3 study amalgamated the overlapping CIs with Kruskal-Wallis test results to probe the effects of moderating variables (sex, age, type of disability, intervention settings, interventionists and intervention duration) on STEM education.

Disability type. Overall, this study found that students with ASD-ID were likely to encounter increased difficulty in their

educational pursuits, which might have contributed to the variations in intervention levels among the three disability types. The intervention effect for children aged five to six years was extremely strong. Yet their confidence intervals overlapped with other age groups, indicating no significant differences in efficacy across K-12 students. This aligns with Kazu and Yalçın (2021), whose meta-analysis found no statistically significant variation in STEM learning outcomes by educational level (age group), emphasising STEM's consistent academic benefits regardless of student stage. Future research should focus on tailoring age-specific instructional strategies to further enhance learning outcomes within this universal effectiveness. The results showed that disability type had a moderating effect. Owing to the many overlapping clinical features between ID and ASD, especially regarding social communication, imagination and repetitive, stereotyped behaviours, individuals with comorbid ID and ASD often had more severe impairments than those with ID alone (Cen et al., 2017). Other studies have indicated that population with comorbid ID and ASD exhibit a higher incidence of maladaptive behaviours, psychopathology and emotional difficulties than those without ASD (Brereton et al., 2006). Overall, students with co-occurring ASD and ID have lower abilities in STEM-related areas than those with other single disability types (Martin et al., 2020) and might have more cognitive difficulties, which could make it challenging for them to apply the skills or behaviours learned in specific environments to other settings. This might affect the maintenance and generalisation of intervention effects (Sigafoos et al. 2008). When teachers carry out STEM teaching, they should consider the practical needs of different types of disabilities. Since sex and age have no moderating effect, we believe that STEM education is suitable for all age groups and genders. Research has shown that exposing young children to STEM is crucial for fostering their learning interest and enhancing their academic and employment achievements (Noonan, 2017). Moreover, Brigham et al. (2011) believed that the earlier students were exposed to STEM education, the better they understood STEM content. Frontline teaching practices can pay more attention to this group.

Intervention processes. The results revealed no moderating effects of intervention settings, interventionists, or intervention duration. Research indicates that the interdisciplinary nature of STEM enables it to function in various intervention settings (Borda et al., 2020). Considering the increasing number of students receiving inclusive education and their desire to participate in society (Fleury et al., 2014), more research can focus on conducting studies in inclusive classrooms and communities to enhance students' social adaptability. About half of the studies included interventions implemented by professional researchers and the effects were extremely strong. Professionals could use specialised assessment tools and resources to design and implement effective intervention plans based on students' situations and objectively assess their condition and progress (Kasari et al., 2012). Israel et al. (2013) suggested that selecting interventionists in STEM education depended on the grade levels of students with ID and ASD, STEM areas, teaching settings and teachers' familiarity with the STEM content. Future efforts should be committed to promoting interdisciplinary teacher collaboration, integrating general education teachers, special education teachers and researchers to form interdisciplinary teaching teams. These teams will jointly conduct joint lesson preparation, teaching behaviour analysis and carry out research on practical problems in teaching to enhance STEM education quality (Wu, 2022). This study's results revealed that the best interventions were performed less than ten times, with an effect size of one; in addition, other durations showed strong-to-extremely strong effects. The reason may be attributed to the unique characteristics of students with ASD and students

with ID, resulting in a higher prevalence of SCD currently being conducted (Iatraki and Soulis, 2021), with significant variations in experimental designs among these studies and intervention procedures for different skills across various STEM domains not being uniform. However, the number of interventions with a duration of less than ten sessions was limited; therefore, further validation is required to ensure the robustness of this result. Future studies can also longitudinally analyse the impact of intervention frequency on outcomes and explore the relationships between moderating variables. Research indicates that teaching STEM to those individuals were not restricted by the settings, interventionists, or intervention duration. This finding not only demonstrates their potential to participate in and benefit from STEM learning but also reflects the flexibility and adaptability of the STEM approach. More importantly, this finding emphasises the necessity of providing equal STEM learning opportunities for students with ASD and students with ID.

Limitations and future directions. This study had several limitations. First, studies on teaching STEM education to ID and ASD students have focused on the mathematics, science and technology domains; as such, there was a lack of research in engineering and interdisciplinary STEM areas. Therefore, future STEM education should continue to enrich research in these areas. Additionally, future longitudinal studies on students with ASD and students with ID are also needed. Educators can observe the generalisation effects over time to better understand the developmental process of STEM skills in this population and assess the long-term trends in STEM education.

Second, although WOS provides extensive literature resources, its coverage is biased and excludes other databases and grey literature, potentially affecting the study's comprehensiveness. Our systematic review and meta-analysis may not fully represent the research. Future research should integrate other databases such as Scopus, ERIC, PubMed, Springer and Elsevier databases and grey literature to provide a more comprehensive review and reduce potential publication bias.

Third, this study excluded randomised controlled experiments and qualitative studies and concentrated solely on single-case studies. This limitation restricted the interpretation of the findings and introduced a potential risk of bias. Although a meta-analysis was valuable for summarising the effects of STEM interventions in individuals with ID and ASD, future reviews could use other methods (e.g. systematic reviews, RCTs, mixed-methods approaches).

Fourth, this study did not examine the impact of disability severity on STEM intervention effectiveness and included few participants with severe ID. This results in insufficient attention to students with high support needs, who are key targets for assistive technologies (e.g. brain-computer interfaces, neurofeedback). Future research should thoroughly investigate the impact of disability severity (e.g. from mild to severe) on STEM teaching effectiveness, focus on developing adaptive STEM teaching programmes based on cognitive ability stratification and evaluate the effectiveness of various assistive technologies.

Implications for research and practice. The research indicates that STEM interventions are effective for students with ASD and students with ID, demonstrating that STEM can provide rich learning experiences, ameliorate academic difficulties and facilitate better engagement in learning activities for this population, enhancing their understanding of the world. In addition to academic abilities, it promotes students' enquiry skills, problem-solving capabilities and social competencies (Hutchison et al., 2024; De Loof et al., 2022). While the study highlights

maintenance and generalisation effectiveness, research remains concentrated in mathematics, science and technology, with gaps in engineering and limited interdisciplinary studies, and a lack of long-term outcome validation. Accordingly, we propose dual recommendations: policymakers should prioritise the development of engineering-focused educational programmes and establish a 'STEM + Humanities and Arts' integrated framework, such as expanding interdisciplinary approaches in the arts (i.e. dance, music, theatre, visual arts and media arts) (Hwang and Taylor, 2016; Perignat and Katz-Buonincontro, 2019) and social sciences to enhance students' holistic competencies. Additionally, implement legislation to improve in transparency special education budget allocation. Researchers should use longitudinal designs to investigate the long-term effects of STEM learning, focusing on core indicators such as skill retention, transfer efficacy in community settings, vocational training completion rates and higher education enrolment/attrition rates. Furthermore, explore the mechanisms through which school support systems influence STEM achievement for students with disabilities.

This study summarises optimal STEM interventions across domains and highlights diversified teaching strategies for students with varying disabilities. To effectively implement STEM interventions, we propose a 'Teacher Development System for Inclusive STEM Practice'. First, differentiated instructional design involves creating adaptive teaching frameworks with tiered interventions tailored to students' diverse needs. By integrating interdisciplinary approaches (e.g. integrating art into mathematics, combining science with engineering, or using robotics for social skill training), reducing learning gaps for ASD/ID students while enhancing teachers' interdisciplinary teaching skills. Second, training in emerging assistive technologies equips educators to utilise adaptive learning platforms, VM, AI feedback and AR/VR simulations to support students' executive function development (Ayeni et al., 2024). Real-time analytics should be used to monitor participation in STEM activities, enabling dynamic assessments and adjustments to support levels, task difficulty and technical assistance intensity (Nuangchalem and Prachagool, 2023). Third, establish cross-departmental partnerships between special education and STEM teachers to co-design STEM + X thematic modules (e.g. 'Eco-Engineering Community Solutions') using universal design principles. Develop localised resource libraries, including adaptive technology toolkits and differentiated assessment plans, to help teachers optimise instruction by accessing intervention components in real-time.

This study also explored the variables that affect the effectiveness of STEM learning and the results indicated that different types of disabilities significantly impact learning outcomes. In particular, most studies have overlooked the academic performance of students with ASD-ID (Russell et al., 2019). This study fills that gap. Future studies should delve deeper into how cultural and socioeconomic backgrounds shape STEM learning experiences for students with ID and ASD. For instance, cross-cultural comparisons could uncover how cultural scripts influence STEM motivation and engagement for these students, revealing how educational philosophies and methods in diverse cultural contexts affect learning outcomes. Additionally, research should investigate socioeconomic factors such as family income, accessibility of educational resources and the strength of community support systems, as these elements can influence STEM learning opportunities and effectiveness. By considering these variables comprehensively, we can provide more targeted and effective educational support for students with ASD and students with ID, helping them integrate into society and enhance their quality of life.

Overall, this systematic review and meta-analysis offer comprehensive insights into the effectiveness of STEM teaching

for students with ASD and students with ID, the prospects of enhancing STEM skills and the influence of moderating variables on STEM learning outcomes. These findings could inform instructors, educational practitioners and policymakers in identifying potential challenges and promoting the development of STEM education.

Data availability

All data generated or analysed during this study are included within the article and its supplementary information files.

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Note

1 ID and ASD mentioned in this study can be found in The Diagnostic and Statistical Manual of Mental Disorders (Fifth Edition) (DSM-5)

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Author contributions

Fang Da: Conceptualisation of the research, manuscript writing, data collection and analysis and revision and supervision of the research. Ying Ma and Minjie Ma: Manuscript writing, data collection and analysis. Jieyu Mao, Zijiang Weng and Chao Yang: Manuscript revision. Tingzhao Wang: funding acquisition, revision and supervision of the research and final approval of the version to be published.

Ethical approval

Ethical approval was not required as the study did not involve human participants.

Informed consent

Informed consent was not required as the study did not involve human participants.

Competing interests

The authors declare no competing interests.

Additional information

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Anchorage School District
Fiscal Year 2026-2027

PROJECTED REVENUES AND EXPENDITURES SUMMARY

Fund	Revenues and Fund Balance				2026-2027 Revenue/Source Projections	2026-2027 Expenditure Projections
	Local	State	Federal			
	Taxes	Other				
General Fund	\$ 235,199,741	\$ 23,538,399	\$ 327,024,596	\$ 15,858,150	\$ 601,620,886	\$ 601,620,886
Project Carryover		30,000,000			30,000,000	30,000,000
Transportation Fund	12,925,975		20,708,517		33,634,492	33,634,492
Local, State and Federal Grants Fund		3,508,622	7,077,810	79,589,583	90,176,015	90,176,015
Debt Service Fund	34,852,970	695,498	13,596,109		49,144,577	49,144,577
Capital Projects Fund		25,538,133			25,538,133	25,538,133
Student Nutrition Fund		3,888,061	-	25,384,790	29,272,851	29,272,851
Student Activities Fund		7,900,000			7,900,000	7,900,000
ASD Managed Total	<u>282,978,686</u>	<u>95,068,713</u>	<u>368,407,032</u>	<u>120,832,523</u>	<u>867,286,954</u>	<u>867,286,954</u>
SOA PERS/TRS On-behalf			50,000,000		50,000,000	50,000,000
TOTAL	<u>\$ 282,978,686</u>	<u>\$ 95,068,713</u>	<u>\$ 418,407,032</u>	<u>\$ 120,832,523</u>	<u>\$ 917,286,954</u>	<u>\$ 917,286,954</u>
Percentage of Revenue Sources to Total Revenue Projections	30.85%	10.36%	45.61%	13.17%	100.00%	

Computation of Total Taxes
for Calendar Year 2026

			General and Transportation Funds	Debt Service Fund
Amount required to fund second half of Adopted FY 2025-2026 Budget: January 1, 2026-June 30, 2026	\$	133,671,113	\$ 119,217,243	\$ 14,453,870
Amount required to fund first half of Adopted FY 2026-2027 Budget: July 1, 2026-December 31, 2026	\$	141,489,343	<u>124,062,858</u>	<u>17,426,485</u>
TOTAL Taxes for Calendar Year 2026			<u>\$ 243,280,101</u>	<u>\$ 31,880,355</u>
Total Taxes for Calendar Year 2026				
<u>Total Taxes 2026</u>	\$	275,160,456 = 6.955 mills	\$ 243,280,101	\$ 31,880,355
Assessed Valuation	\$	39,564,689,895	\$ 39,564,689,895	\$ 39,564,689,895
			<u>6.149 mills</u>	<u>0.806 mills</u>

Appendix E

Anchorage School District
Fiscal Year 2026-2027

COMPUTATION OF MUNICIPAL PROPERTY TAX LIMITATION

		<u>Charter Limit</u>
Taxes Projected – Anchorage School District FY 2025-2026		\$ 267,342,224
Less: Prior Year Taxes Required for Debt Service		<u>28,907,739</u>
Net Taxes Approved for General and Transportation Funds		238,434,485
<u>Allowable Growth Factors</u>		
Population – 5 year Average	-0.3%	
CPI – 5 average year Anchorage Urban	<u>3.1%</u>	
	2.8%	<u>6,676,166</u>
Basic Tax Limitation		245,110,651
<u>Plus Exclusions:</u>		
Judgments/Legal Settlements		-
Taxes for Operations and Maintenance on New Voter Approved Facilities		-
Taxes Requested on New Construction/Property Improvements		<u>3,015,065</u> [1]
Tax Limitation – General Fund		248,125,716
Taxes Requested for Debt Service		<u>34,852,970</u>
Tax Limitation FY 2026-2027		282,978,686
General and Transportation Funds	248,125,716	
Debt Service Fund	<u>34,852,970</u>	
Taxes Projected in Financial Plan – FY 2026-2027		<u>282,978,686</u>
Amount Over (Under) as allowed by the Property Tax Cap Limitation under the MOA Charter		<u>\$ -</u>

[1] New construction amount taken from the Municipality of Anchorage's 2026 Proposed General Government Operating Budget.