

VENDOR CONTRACT

Between _____ and
(Company Name)

THE INTERLOCAL PURCHASING SYSTEM (TIPS)

For

FURNITURE

CONTRACT NUMBER 1102215

General Information

The vendor contract shall include the contract, the terms and conditions, special terms and conditions, any agreed upon amendments, as well as all of the sections of the solicitation and the awarded vendor's proposal. Once signed, if an awarded vendor's proposal varies or is unclear in any way from the TIPS contract, TIPS, at its sole discretion, will decide which provision will prevail. Other documents to be included are the awarded vendor's proposals, task orders, purchase orders and any adjustments which have been issued.

The following pages will constitute the contract between the successful vendors(s) and TIPS. Bidders shall state, in a separate writing, and include with their proposal response, any required exceptions or deviations from these terms, conditions, and specifications. If agreed to by TIPS, they will be incorporated into the final contract.

The Vendor Contract ("Contract") made and entered into by and between The Interlocal Purchasing System (hereinafter referred to as "TIPS" respectfully) a government cooperative purchasing program authorized by the Region VIII Education Service Center, having its principal place of business at 4845 US Hwy 271 North, Pittsburg, Texas 75686. This contract consists of the provisions set forth below, including provisions of all Attachments referenced herein. In the event of a conflict between the provisions set forth below and those contained in any Attachment, the provisions set forth shall control.

Definitions

PURCHASE ORDER is the TIPS member's approval providing the authority to proceed with the negotiated delivery order under the contract. Special terms and conditions as agreed to between the vendor and TIPS member will be added as addendums to the PO. Items such as certificate of insurance, bonding requirements, small or disadvantaged business goals are some of the addendums possible.

PREMIUM HOURS are defined as those hours not included in regular hours or recognized holidays. Premium hours are to be approved by the TIPS member for each delivery order and noted in the delivery order proposal as a line item during negotiations.

REGULAR HOURS are defined as those hours between the hours of 7 AM and 6 PM Monday thru Friday.

Terms and Conditions

Freight

All deliveries shall be freight prepaid, F.O.B. destination and shall be included in all pricing offered unless otherwise clearly stated in writing.

Warranty Conditions

All supplies equipment and services shall include manufacturer's minimum standard warranty unless otherwise agreed to in writing. Vendor shall be an authorized dealer, distributor or manufacturer for all products. All equipment proposed shall be new unless clearly stated in writing.

Customer Support

The Vendor shall provide timely and accurate customer support to TIPS members. Vendors shall respond to such requests within one (1) working day after receipt of the request. Vendor shall provide training regarding products and services supplied by the Vendor unless otherwise clearly stated in writing at the time of purchase. (Unless training is a line item sold or packaged and must be purchased with product.)

Contracts

All contracts and agreements between Vendors and TIPS Members shall strictly adhere to the statutes that are set forth in the Uniform Commercial Code as most recently revised.

Contracts for purchase will normally be put into effect by means of a purchase order(s) executed by authorized agents of the participating government entities.

Davis Bacon Act requirements will be met when Federal Funds are used for construction and/or repair of buildings.

Tax exempt status

A taxable item sold, leased, rented to, stored, used, or consumed by any of the following governmental entities is exempted from the taxes imposed by this chapter:(1) the United States; (2) an unincorporated instrumentality of the United States; (3) a corporation that is an agency or instrumentality of the United States and is wholly owned by the United States or by another corporation wholly owned by the United States;(4) the State of Texas; (5) a Texas county, city, special district, or other political subdivision; or (6) a state, or a governmental unit of a state that borders Texas, but only to the extent that the other state or governmental unit

exempts or does not impose a tax on similar sales of items to this state or a political subdivision of this state. Texas Tax Code § 151.309.

Assignments of contracts

No assignment of contract may be made without the prior written approval of TIPS. Payment can only be made to the awarded Vendor or vendor assigned dealer.

Disclosures

1. Vendor affirms that he/she has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor or service to a public servant in connection with this contract.
2. Vendor shall attach, in writing, a complete description of any and all relationships that might be considered a conflict of interest in doing business with participants in the TIPS program.
3. The vendor affirms that, to the best of his/her knowledge, the offer has been arrived at independently, and is submitted without collusion with anyone to obtain information or gain any favoritism that would in any way limit competition or give an unfair advantage over other vendors in the award of this contract.

Renewal of Contracts

The contract is for one (1) year with an option for renewal for 2 consecutive years. Total term of contract can be up to 3 years if sales are reported through the contract and both parties agree.

Shipments

The Vendor shall ship ordered products within five (5) working days after the receipt of the order. If a product cannot be shipped within that time, the Vendor shall notify TIPS and the requesting entity as to why the product has not shipped and shall provide an estimated shipping date, if applicable. TIPS or the requesting entity may cancel the order if estimated shipping time is not acceptable.

Invoices

The Vendor or vendor assigned dealer shall submit invoices, to the TIPS participant. Each invoice shall include the TIPS participant's purchase order number. The shipment tracking number or pertinent information for verification of TIPS participant receipt shall be made available upon request. The Vendor or vendor assigned dealer shall not invoice for partial shipments unless agreed to in writing in advance by TIPS and the TIPS participant.

Payments

The TIPS participant will make payments directly to the Vendor or vendor assigned dealer at net 30 days after receiving invoice.

Pricing

The Vendor contracts to provide pricing to TIPS and its participating governmental entities that is the lowest pricing available to like cooperative purchasing customers and the pricing shall remain so throughout the duration of the contract.

The Vendor agrees to promptly lower the cost of any product purchased through TIPS following a reduction in the manufacturer or publisher's direct cost to the Vendor. Price increases will be honored. However, the Vendor shall honor previous prices for thirty (30) days after written notification to TIPS of an increase.

All pricing submitted to TIPS shall include the participation fee to be remitted to TIPS by the Vendor. Vendor will not show adding the fee to the invoice presented to customer. The normal fee is 2%, but can be negotiated with the Vendor.

Participation Fees

Vendor or vendor assigned dealer contracts to pay the participation fee for all contract sales to TIPS on a monthly scheduled report. Vendor must login to the TIPS database and use the "Submission Report" section to report sales. The Vendor or vendor assigned dealers are responsible for keeping record of all sales that go through the TIPS contract. Failure to pay the participation fee will result in termination of contract. Please contact TIPS at tips@tips-usa.com or call (866) 839-8477 if you have questions about paying fees.

Indemnity

- 1. Indemnity for Personality Contracts.** Vendor agrees to indemnify and hold harmless and defend TIPS, TIPS member(s), officers and employees, from and against all claims and suits for damages, injuries to persons (including death), property damages, losses, and expenses including court costs and attorney's fees, arising out of, or resulting from, Vendor's performance of this contract, including all such causes of action based upon common, constitutional, or statutory law, or based in whole or in part, upon allegations of negligent or intentional acts on the part of the Vendor, its officers, employees, agents, subcontractors, licensees, invitees, whether or not such claims are based in whole or in part upon the negligent acts or omissions of the TIPS, TIPS member(s), officers, employees, or agents.
- 2. Indemnity for Performance Contracts.** The Vendor agrees to indemnify and hold harmless and defend TIPS, TIPS member(s), officers and employees from and against all claims and suits for damages, injuries to persons (including death), property damages, losses, and expenses including court costs and attorney's fees, arising out of, or resulting from, Vendor's work under this contract, including all such causes of action based upon common, constitutional, or statutory law, or based in whole or in part, upon allegations of negligent or intentional acts on the part of the Vendor, its officers, employees, agents, subcontractors, licensees, or invitees. Vendor further agrees to indemnify and

hold harmless and defend TIPS, TIPS member(s), officers and employees, from and against all claims and suits for injuries (including death) to an officer, employee, agent, subcontractor, supplier or equipment lessee of the Vendor, arising out of, or resulting from, Vendor's work under this contract whether or not such claims are based in whole or in part upon the negligent acts or omissions of the TIPS, TIPS member(s), officers, employees, or agents.

Attorney's Fees--Texas Local Government Code § 271.159 is expressly referenced.

Pursuant to §271.159, TEXAS LOC. GOV'T CODE, in the event that any one of the Parties is required to obtain the services of an attorney to enforce this Agreement, the prevailing party, in addition to other remedies available, shall be entitled to recover reasonable attorney's fees and costs of court.

Multiple Vendor Awards

TIPS reserves the right to award multiple vendor contracts for categories when deemed in the best interest of the TIPS membership. Bidders scoring 80% or above will be considered for an award. Categories are established at the discretion of TIPS.

State of Texas Franchise Tax

By signature hereon, the bidder hereby certifies that he/she is not currently delinquent in the payment of any franchise taxes owed the State of Texas under Chapter 171, Tax Code.

Miscellaneous

The Vendor acknowledges and agrees that continued participation in TIPS is subject to TIPS sole discretion and that any Vendor may be removed from the participation in the Program at any time with or without cause. Nothing in the contract or in any other communication between TIPS and the Vendor may be construed as a guarantee that TIPS participants will submit any orders at any time. TIPS reserves the right to request additional proposals for items already on contract at any time.

Purchase Order Pricing/Product Deviation

If a deviation of pricing/product on a purchase order occurs, TIPS is to be notified within 24 hours of receipt of order.

Cancellation for non-performance or contract deficiency

TIPS may terminate any contract if TIPS Members have not used the contract, or if purchase volume is determined to be "low volume" in any 12-month period. TIPS reserves the right to cancel the whole or any part of this contract due to failure by awarded vendor to carry out any obligation, term or condition of the contract. TIPS may issue a written deficiency notice to awarded vendor for acting or failing to act in any of the following:

- Providing material that does not meet the specifications of the contract;

- Providing work and/or material that was not awarded under the contract;
- Failing to adequately perform the services set forth in the scope of work and specifications;
- Failing to complete required work or furnish required materials within a reasonable amount of time;
- Failing to make progress in performance of the contract and/or giving TIPS reason to believe that awarded vendor will not or cannot perform the requirements of the contract; and/or
- Performing work or providing services under the contract prior to receiving a TIPS reviewed purchase order for such work.

Upon receipt of the written deficiency, awarded vendor shall have ten (10) days to provide a satisfactory response to TIPS. Failure to adequately address all issues of concern may result in contract cancellation. Upon cancellation under this paragraph, all goods, materials, work, documents, data and reports prepared by awarded vendor under this contract shall become the property of the TIPS Member on demand.

TIPS Member Purchasing Procedures

Purchase orders are issued by participating TIPS member to the awarded vendor indicating on the PO "Contract Number". Purchase Order is emailed to TIPS at tipspo@tips-usa.com.

- Awarded vendor delivers goods/services directly to the participating member.
- Awarded vendor invoices the participating TIPS member directly.
- Awarded vendor receives payment directly from the participating member.
- Awarded vendor reports sales monthly to TIPS (unless prior arrangements have been made with TIPS to report monthly).

Form of Contract

The form of contract for this solicitation shall be the Request for Proposal, the awarded proposal(s) and best and final offer(s), and properly issued and reviewed purchase orders referencing the requirements of the Request for Proposals. If a vendor submitting an offer requires TIPS and/or TIPS Member to sign an additional agreement, a copy of the proposed agreement must be included with the proposal.

Vendor contract documents: TIPS will review proposed vendor contract documents. Vendor's contract document shall not become part of TIPS's contract with vendor unless and until an authorized representative of TIPS reviews and approves it.

Licenses

Awarded vendor shall maintain in current status all federal, state and local licenses, bonds and permits required for the operation of the business conducted by awarded vendor. Awarded vendor shall remain fully informed of and in compliance with all ordinances and regulations pertaining to the lawful provision of services under the contract. TIPS reserves the right to stop

work and/or cancel contract of any awarded vendor whose license(s) expire, lapse, are suspended or terminated.

Novation

If awarded vendor sells or transfers all assets or the entire portion of the assets used to perform this contract, a successor in interest must guarantee to perform all obligations under this contract. TIPS reserves the right to accept or reject any new party. A simple change of name agreement will not change the contractual obligations of awarded vendor.

Site Requirements (when applicable to service or job)

Cleanup: Awarded vendor shall clean up and remove all debris and rubbish resulting from their work as required or directed by TIPS Member. Upon completion of work, the premises shall be left in good repair and an orderly, neat, clean and unobstructed condition.

Preparation: Awarded vendor shall not begin a project for which TIPS Member has not prepared the site, unless awarded vendor does the preparation work at no cost, or until TIPS Member includes the cost of site preparation in a purchase order.

Site preparation includes, but is not limited to: moving furniture, installing wiring for networks or power, and similar pre-installation requirements.

Registered sex offender restrictions: For work to be performed at schools, awarded vendor agrees that no employee of a sub-contractor who has been adjudicated to be a registered sex offender will perform work at any time when students are or reasonably expected to be present. Awarded vendor agrees that a violation of this condition shall be considered a material breach and may result in the cancellation of the purchase order at the TIPS Member's discretion.

Awarded vendor must identify any additional costs associated with compliance of this term. If no costs are specified, compliance with this term will be provided at no additional charge.

Safety measures: Awarded vendor shall take all reasonable precautions for the safety of employees on the worksite, and shall erect and properly maintain all necessary safeguards for protection of workers and the public. Awarded vendor shall post warning signs against all hazards created by the operation and work in progress. Proper precautions shall be taken pursuant to state law and standard practices to protect workers, general public and existing structures from injury or damage.

Smoking

Persons working under contract shall adhere to local smoking policies. Smoking will only be permitted in posted areas or off premises.

Invoices

The awarded vendor shall submit invoices to the participating entity clearly stating "Per TIPS Contract". The shipment tracking number or pertinent information for verification shall be made available upon request.

Marketing

Awarded vendor agrees to allow TIPS to use their name and logo within website, marketing materials and advertisement. Any use of TIPS name and logo or any form of publicity, inclusive of press release, regarding this contract by awarded vendor must have prior approval from TIPS.

Supplemental agreements

The entity participating in the TIPS contract and awarded vendor may enter into a separate supplemental agreement to further define the level of service requirements over and above the minimum defined in this contract i.e. invoice requirements, ordering requirements, specialized delivery, etc. Any supplemental agreement developed as a result of this contract is exclusively between the participating entity and awarded vendor. TIPS, its agents, TIPS members and employees shall not be made party to any claim for breach of such agreement.

Legal obligations

It is the responding vendor's responsibility to be aware of and comply with all local, state and federal laws governing the sale of products/services identified in this RFP and any awarded contract thereof. Applicable laws and regulations must be followed even if not specifically identified herein.

Audit rights

Awarded Vendor shall, at their sole expense, maintain appropriate due diligence of all purchases made by TIPS Member that utilizes this Contract. TIPS and Region 8 ESC each reserve the right to audit the accounting for a period of three (3) years from the time such purchases are made. This audit right shall survive termination of this Agreement for a period of one (1) year from the effective date of termination. TIPS shall have authority to conduct random audits of Awarded Vendor's pricing that is offered to TIPS Members. Notwithstanding the foregoing, in the event that TIPS is made aware of any pricing being offered to eligible entities that is materially inconsistent with the pricing under this agreement, TIPS shall have the ability to conduct the audit internally or may engage a third-party auditing firm. In the event of an audit, the requested materials shall be provided in the format and at the location designated by Region 8 ESC or TIPS.

Force Majeure

If by reason of Force Majeure, either party hereto shall be rendered unable wholly or in part to carry out its obligations under this Agreement then such party shall give notice and fully particulars of Force Majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied upon, and the obligation of the party giving such notice, so far as it is affected by such Force Majeure, shall be suspended during the continuance of the inability then claimed, except as hereinafter provided, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch.

Services

When applicable, performance bonds will be required on construction or labor required jobs over \$100,000 and payment bonds on jobs over \$25,000 or awarded vendor will meet the TIPS member's local and state purchasing requirements. Awarded vendors may need to provide additional capacity as jobs increase. Bonds will not require that a fee be paid to TIPS. The actual cost of the bond will be a pass through to the TIPS member and added to the purchase order.

Scope of Services

The specific scope of work for each job shall be determined in advance and in writing between TIPS Member and Awarded vendor. It is okay if the TIPS member provides a general scope, but the awarded vendor should provide a written scope of work to the TIPS member as part of the proposal. Once the scope of the job is agreed to, the TIPS member will issue a PO with the estimate referenced as an attachment along with bond and any other special provisions agreed to for the TIPS member. If special terms and conditions other than those covered within this solicitation and awarded contracts are required, they will be attached to the PO and shall take precedence over those in the base contract.

Project Delivery Order Procedures

The TIPS member having approved and signed an interlocal agreement, or other TIPS membership document, may make a request of the awarded vendor under this contract when the TIPS member has services that need to be undertaken. Notification may occur via phone, the web, email, fax, or in person.

Upon notification of a pending request, the awarded vendor shall make contact with the TIPS member as soon as possible, but must make contact with the TIPS member within two working days.

Scheduling of Projects

Scheduling of projects (if applicable) will be accomplished when the TIPS member issues a purchase order that will serve as "the notice to proceed". The period for the delivery order will include the mobilization, materials purchase, installation and delivery, design, weather, and site cleanup and inspection. No additional claims may be made for delays as a result of these items. When the tasks have been completed the awarded vendor shall notify the client and have the TIPS member inspect the work for acceptance under the scope and terms in the PO. The TIPS member will issue in writing any corrective actions that are required. Upon completion of these items, the TIPS member will issue a completion notice and final payment will be issued.

Support Requirements

If there is a dispute between the awarded vendor and TIPS member, TIPS or its representatives will assist in conflict resolution or third party (mandatory mediation), if requested by either party. TIPS, or its representatives, reserves the right to inspect any project and audit the awarded vendors TIPS project files, documentation and correspondence.

Special Terms and Conditions

It is the intent of TIPS to contract with a reliable, high performance vendor to supply products and services to government and educational agencies. It is the experience of TIPS that the following procedures provide TIPS, the Vendor, and the participating agency the necessary support to facilitate a mutually beneficial relationship. The specific procedures will be negotiated with the successful vendor.

- **Contracts:** All vendor purchase orders must be emailed to TIPS at tipspo@tips-usa.com. Should an agency send an order direct to vendor, it is the vendor's responsibility to forward the order to TIPS at the email above within 24 business hours and confirm its receipt with TIPS.
 - **Promotion of Contract:** It is agreed that Vendor will encourage all eligible entities to purchase from the TIPS Program. Encouraging entities to purchase directly from the Vendor and not through TIPS contract is not acceptable to the terms and conditions of this contract and will result in removal of Vendor from Program. Vendor is expected to use marketing funds for the marketing and promotion of this contract.
 - **Daily Order Confirmation:** All contract purchase orders will be approved daily by TIPS and sent to vendor. The vendor must confirm receipt of orders to the TIPS member (customer) within 24 business hours.
 - **Vendor custom website for TIPS:** If Vendor is hosting a custom TIPS website, then updated pricing must be posted by 1st of each month.
 - **Back Ordered Products:** If product is not expected to ship within 3 business days, customer is to be notified within 24 hours and appropriate action taken based on customer request.
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Check one of the following responses to the General Terms and Special Terms and Conditions:

() We take no exceptions/deviations to the general and/or special terms and conditions.

(Note: If none are listed below, it is understood that no exceptions/deviations are taken.)

() We take the following exceptions/deviations to the general and/or special terms and conditions. All exceptions/deviations must be clearly explained. Reference the corresponding general or special terms and conditions that you are taking exceptions/deviations to. The proposer must clearly state if you are adding additional terms and conditions to the general or special terms and conditions. Provide details on your exceptions/deviations below:

CONTRACT Signature Form

The undersigned hereby proposes and agrees to furnish goods and/or services in compliance with the terms, specifications and conditions at the prices quoted unless noted in writing. The undersigned further certifies that he or she is an authorized agent of the company and has authority to negotiate and contract for the company named below.

Company Name: Stand2Learn

Mailing Address: 5713 Shellbournes Hill

City: College Station

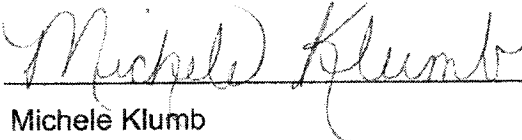
State: Texas

Zip: 77845

Telephone Number: (214) 785-2125

Fax Number: (979) 693-3333

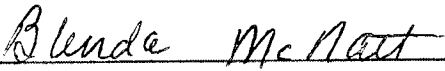
Email Address: michele.klumb@stand2learn.com

Authorized Signature: 

Printed Name: Michele Klumb

Position: Vice President

This contract is for a total TERM of one year with the option of two additional years. Vendors shall honor the participation fee for any sales made based on the TIPS contract. Failure to pay the fee will be grounds for termination of contract and will affect the award of future contracts.

 10-22-15
TIPS Authorized Signature Date

 10-22-15
Approved by Region VIII ESC Date

The Interlocal Purchasing System (TIPS Cooperative) Supplier Response

Bid Information		Contact Information		Ship to Information
Bid Creator	Mr. David Mabe National Coordinator	Address	Region VIII Education Service Center 4845 US Highway 271 North Pittsburg, TX 75686	Address
Email	david.mabe@tips-usa.com	Contact	Kim Thompson, Coordinator of Office Operations	Contact
Phone	+1 (903) 243-4759	Department		Department
Fax	+1 (866) 749-6674	Building		Building
Bid Number	1102215	Floor/Room		Floor/Room
Title	Furniture	Telephone	+1 (866) 839-8477	Telephone
Bid Type	RFP	Fax	+1 (866) 839-8472	Fax
Issue Date	08/03/2015	Email	bids@tips-usa.com	Email
Close Date	9/11/2015 3:00:00 PM CT			
Need by Date				

Supplier Information

Company Stand2Learn
 Address 5713 Shellbournes Hill
 College Station, TX 77845
 Contact
 Department
 Building
 Floor/Room
 Telephone 1 (214) 7852125
 Fax 1 (979) 6933333
 Email
 Submitted 9/7/2015 2:09:22 PM CT
 Total \$0.00

Signature Michele Klumb

Email michele.klumb@stand2learn.com

Supplier Notes

Pricing includes shipping. However, on large volumes please contact Stand2Learn for improved pricing through more economical freight terms.

Bid Notes

Bid Activities

Bid Messages

Date	Subject	Message
08/13/15	Pre-Bid Webinar	<p>** The webinar is being recorded for those that have scheduling conflicts. Please contact TIPS at tips@tips-usa.com for a link to the recorded session.</p> <p>1. Please join my meeting. https://global.gotomeeting.com/join/604337077</p> <p>2. Use your microphone and speakers (VoIP) - a headset is recommended. Or, call in using your telephone.</p> <p>Dial +1 (872) 240-3412 Access Code: 604-337-077 Audio PIN: Shown after joining the meeting</p> <p>Meeting ID: 604-337-077</p>
08/13/15	Pre-Bid Webinar	<p>** The webinar is being recorded for those that have scheduling conflicts. Please contact TIPS at tips@tips-usa.com for a link to the recorded session.</p> <p>Monday, August 17, 2015, 10:00 AM (CST)</p> <p>1. Please join my meeting. https://global.gotomeeting.com/join/604337077</p> <p>2. Use your microphone and speakers (VoIP) - a headset is recommended. Or, call in using your telephone.</p> <p>Dial +1 (872) 240-3412 Access Code: 604-337-077 Audio PIN: Shown after joining the meeting</p> <p>Meeting ID: 604-337-077</p>

Please review the following and respond where necessary

#	Name	Note	Response
1	Yes - No	Disadvantaged/Minority/Women Business Enterprise - D/M/WBE (Required by some participating governmental entities) Vendor certifies that their firm is a D/M/WBE? Vendor must upload proof of certification to the "Response Attachments" D/M/WBE CERTIFICATES section.	No
2	Yes - No	Highly Underutilized Business - HUB (Required by some participating governmental entities) Vendor certifies that their firm is a HUB? Vendor must upload proof of certification to the "Response Attachments" HUB CERTIFICATES section.	No
3	Yes - No	The Vendor can provide services and/or products to all 50 US States?	Yes
4	States Served:	If answer is NO to question #3, please list which states can be served. (Example: AR, OK, TX)	

5	Company and/or Product Description:	This information will appear on the TIPS website in the company profile section, if awarded a TIPS contract. (Limit 750 characters.)	Stand2Learn is quickly becoming the leader in research based designs for student desks. Research proves that standing height desks not only improve student's health by increasing calorie burn rates by 20% but also improve a student's engagement time by 12%, i.e. test scores. Our standing height desk designs were a bi-product of a CDC research grant to help fight childhood obesity and the design of Dr. Mark Benden, associate professor and Director of the Ergonomic Center at the EOH Department, School of Public Health at Texas A&M University. A Health Focused Desk Helping Students Focus!
6	Primary Contact Name	Primary Contact Name	Michele Klumb
7	Primary Contact Title	Primary Contact Title	Vice President
8	Primary Contact Email	Primary Contact Email	michele.klumb@stand2learn.com
9	Primary Contact Phone	Enter 10 digit phone number. (No dashes or extensions)	2147852125
10	Primary Contact Fax	Enter 10 digit phone number. (No dashes or extensions)	9796933333
11	Primary Contact Mobile	Enter 10 digit phone number. (No dashes or extensions)	9792550690
12	Secondary Contact Name	Secondary Contact Name	Mack Westbrook
13	Secondary Contact Title	Secondary Contact Title	President
14	Secondary Contact Email	Secondary Contact Email	mack.westbrook.com
15	Secondary Contact Phone	Enter 10 digit phone number. (No dashes or extensions)	2147852125
16	Secondary Contact Fax	Enter 10 digit phone number. (No dashes or extensions)	9796933333
17	Secondary Contact Mobile	Enter 10 digit phone number. (No dashes or extensions)	2549137137
18	Admin Fee Contact Name	Admin Fee Contact Name. This person is responsible for paying the admin fee to TIPS.	Mack Westbrook
19	Admin Fee Contact Email	Admin Fee Contact Email	mack.westbrook@stand2learn.com
20	Admin Fee Contact Phone	Enter 10 digit phone number. (No dashes or extensions)	2147852125
21	Purchase Order Contact Name	Purchase Order Contact Name. This person is responsible for receiving Purchase Orders from TIPS.	Michele Klumb
22	Purchase Order Contact Email	Purchase Order Contact Email	michele.klumb@stand2learn.com
23	Purchase Order Contact Phone	Enter 10 digit phone number. (No dashes or extensions)	2147852125
24	Company Website	Company Website (Format - www.company.com)	www.Stand2Learn.com
25	Federal ID Number:	Federal ID Number also known as the Employer Identification Number. (Format - 12-3456789)	46-1397200
26	Primary Address	Primary Address	5713 Shellbournes Hill
27	Primary Address City	Primary Address City	College Station

28	Primary Address State	Primary Address State (2 Digit Abbreviation)	TX
29	Primary Address Zip	Primary Address Zip	77845
30	Search Words:	Please list search words to be posted in the TIPS database about your company that TIPS website users might search. Words may be product names, manufacturers, or other words associated with the category of award. YOU MAY NOT LIST NON-CATEGORY ITEMS. (Limit 500 words) (Format: product, paper, construction, manufacturer name, etc.)	desk, student desk, office desk, standing desk, stand-biased desk, Stand2Learn, height adjustable desk, footrest, computer desk
31	Yes - No	Do you wish to be eligible to participate in a TIPS contract in which a TIPS member utilizes federal funds on contracts exceeding \$100,000? (Non-Construction) (If YES, vendor should download the Federal Regulations for Contracts document from the Attachments section, fill out the form and submit the document in the "Response Attachments" FEDERAL FUNDS section.) (Vendor must also download the Suspension or Debarment Certificate document from the Attachments section, fill out the form and submit the document in the "Response Attachments" SUSPENSION OR DEBARMENT section.)	Yes
32	Yes - No	Certification of Residency (Required by the State of Texas) Company submitting bid is a Texas resident bidder?	Yes
33	Company Residence (City)	Vendor's principal place of business is in the city of?	College Station
34	Company Residence (State)	Vendor's principal place of business is in the state of?	TX
35	Felony Conviction Notice:	(Required by the State of Texas) My firm is, as outlined on PAGE 5 in the Instructions to Bidders document: (Questions 36 - 37)	(No Response Required)
36	Yes - No	A publicly held corporation; therefore, this reporting requirement is not applicable?	No
37	Yes - No	Is owned or operated by individual(s) who has/have been convicted of a felony? If answer is YES, a detailed explanation of the name(s) and conviction(s) must be uploaded to the "Response Attachments" FELONY CONVICTION section.	No
38	Pricing Information:	Pricing information section. (Questions 39 - 42)	(No Response Required)
39	Yes - No	In addition to the typical unit pricing furnished herein, the Vendor agrees to furnish all current and future products at prices that are proportionate to Dealer Pricing. If answer is NO, include a statement detailing how pricing for TIPS participants would be calculated in the PRICING document that is uploaded to the "Response Attachments" PRICING section.	Yes
40	Yes - No	Pricing submitted includes the TIPS administration fee?	Yes
41	Yes - No	Vendor agrees to remit to TIPS the required administration fee?	Yes
42	Yes - No	Additional discounts to TIPS members for bulk quantities or scope of work?	Yes
43	Start Time	Average start time after receipt of customer order is ____ working days?	5
44	Years Experience	Company years experience in this category?	7

- 45 Resellers: Does the vendor have resellers that it will name under this contract? (If applicable, vendor should download the Reseller/Dealers spreadsheet from the Attachments section, fill out the form and submit the document in the "Response Attachments" RESELLERS section. No
- 46 Prices are guaranteed for? (___Month(s), ___ Year(s), or Term of Contract) (Standard Term of Contract term is "Term of Contract")

Line Items

Response Total: \$0.00

Resellers - Dealers

Reseller/Dealer Name	Address	City	State
----------------------	---------	------	-------

NOTE: Stand2Learn has multiple dealers across the U.S. Purchaser may also buy direct from Stand2Learn

Today's Classroom	6551 Middlebranch Ave N	Canton	Ohio
Gopher Sport	2525 Lemond St SW	Owatonna	MN
BSN Sports	1901 Diplomat Drive	Farmers Branch	TX

Zip	Contact Name	Contact Email	Contact Phone
-----	--------------	---------------	---------------

n and note the dealer of record.

44721	Rick Griffith	rick@todaysclassroom.co	877.909.9910
55060	Brianna Isaacson	briannai@gophersport.co	507.446.5768
75234	Ron Halom	rhalom@usgames.com	972.484.9484

Contact Fax	Company Website
-------------	-----------------

www.todaysclassroom.com

www.gophersport.com

www.usgames.com

2 CFR PART 200 Contract Provisions

Required Federal contract provisions of Federal Regulations for Contracts

The following provisions are required to be in place and agreed if the procurement is funded with federal funds. TIPS or its members are the subgrantee or subrecipient by definition in most cases. Not all provisions herein apply to all contracts. Compliance is required as it applies to the individual purchase contract.

**Appendix II to Part 200
Contract Provisions for Non-Federal Entity Contracts Under Federal Awards**

2 CFR PART 200

These contract provisions are incorporated by reference or attachment into all contracts with your company when TIPS or its members purchase is with federal funds if you respond to a TIPS competitive procurement request for proposals or bid..

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

Federal Rule (1) Contracts for more than the simplified acquisition threshold currently set at \$150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

Notice: Pursuant to Federal Rule (1) above, when federal funds are expended by TIPS or its members, TIPS or its members reserves all rights and privileges under the applicable laws and regulations with respect to this procurement in the event of breach of contract by either party.

Does vendor agree? YES *ma* Initial of Authorized Company Official

Federal Rule (2) Termination for cause and for convenience by the grantee or subgrantee including the manner by which it will be effected and the basis for settlement. (All contracts in excess of \$10,000)

Pursuant to Federal Rule (2) above, when federal funds are expended by TIPS OR ITS MEMBERS, TIPS OR ITS MEMBERS reserves the right to terminate any agreement in excess of \$10,000 resulting from this procurement process for cause after giving the vendor an appropriate opportunity and up to 30 days, to cure the causal breach of terms and conditions. TIPS OR ITS MEMBERS reserves the right to terminate any agreement in excess of \$10,000 resulting from this procurement process for convenience with 30 days notice in writing to the awarded vendor. The vendor would be compensated for work performed and goods procured as of the termination date if for convenience of the TIPS OR ITS MEMBERS. Any award under this procurement process is not exclusive and the District reserves the right to purchase goods and services from other vendors when it is in the best interest of the District.

Does vendor agree? YES *mk* Initial of Authorized Company Official

Federal Rule (3) Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

2 CFR PART 200 Contract Provisions

Pursuant to Federal Rule (3) above, when federal funds are expended by TIPS OR ITS MEMBERS, for all construction contracts awarded by grantees and their contractors or subgrantees, the proposer certifies that during the term of an award, when federal funds are expended, by the TIPS OR ITS MEMBERS resulting for this procurement process the vendor will be in compliance with Equal Opportunity Employment laws specifically Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR chapter 60).

Does vendor agree? YES mk Initial of Authorized Company Official

Federal Rule (4) Davis-Bacon Act, as amended (40 U.S.C. 3141-3148). When required by Federal program legislation, all prime construction contracts in excess of \$2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

Pursuant to Federal Rule (4) above, when federal funds are expended by TIPS OR ITS MEMBERS, during the term of an award for all contracts and subgrants for construction or repair, when Federal Funds are expended, by the TIPS OR ITS MEMBERS resulting for this procurement process the vendor will be in compliance with all provisions listed or referenced therein.

Does vendor agree? YES mk Initial of Authorized Company Official

Federal Rule (5) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded by the non-Federal entity in excess of \$100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

Pursuant to Federal Rule (5) above, when federal funds are expended by TIPS OR ITS MEMBERS, the proposer certifies that during the term of an award by the TIPS OR ITS MEMBERS resulting from this procurement process for construction contracts awarded by grantees and subgrantees the proposer agrees to be in compliance with all requirements listed or referenced therein.

Does vendor agree? YES mk Initial of Authorized Company Official

Federal Rule (6) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of "funding agreement" under 37 CFR §401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a

2 CFR PART 200 Contract Provisions

small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

Pursuant to Federal Rule (6) above, when federal funds are expended by TIPS OR ITS MEMBERS, TIPS OR ITS MEMBERS requires that the proposer certify that during the term of an award by the TIPS OR ITS MEMBERS resulting from this procurement process the vendor agrees to the terms listed and referenced therein.

Does vendor agree? YES mk Initial of Authorized Company Official

Federal Rule (7) Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended—Contracts and subgrants of amounts in excess of \$150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

Pursuant to Federal Rule (7) above, when federal funds are expended by TIPS OR ITS MEMBERS, TIPS OR ITS MEMBERS requires that the proposer certify that during the term of an award by the TIPS OR ITS MEMBERS resulting from this procurement process the vendor agrees to the terms listed and referenced therein.

Does vendor agree? YES mk Initial of Authorized Company Official

Federal Rule (8) Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award \$25,000 or greater (see 2 CFR 180.220) must not be made to parties listed on the governmentwide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

Pursuant to Federal Rule (8) above, when federal funds are expended by TIPS OR ITS MEMBERS, TIPS OR ITS MEMBERS requires the proposer certify that during the term of an award by the TIPS OR ITS MEMBERS resulting for this procurement process the vendor certifies that they are not debarred from receiving a contract from the federal government as provided therein.

Does vendor agree they are not debarred as specified above ? YES mk Initial of Authorized Company Official

Federal Rule (9) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

Pursuant to Federal Rule (9) above, when federal funds are expended by TIPS OR ITS MEMBERS, TIPS OR ITS MEMBERS requires the proposer certify that during the term and after the awarded term of an award by the TIPS OR ITS MEMBERS resulting for this procurement process the vendor certifies to the terms included or referenced in Federal Rule 9 above.

2 CFR PART 200 Contract Provisions

Does vendor certify to the provisions in Federal Rule (9) above? YES _____ Initial of Authorized Company Official

Federal Rule (10) 2 CFR 200.233 Retention of all required records for three years after grantees or subgrantees make final payments and all other pending matters are closed.

Pursuant to Federal Rule (10) above, when federal funds are expended by TIPS OR ITS MEMBERS, TIPS OR ITS MEMBERS requires the proposer certify that the awarded vendor retain all required records for three years after grantees or subgrantees make final payments and all other pending matters are closed.

Does vendor agree? YES mk Initial of Authorized Company Official

Federal Rule (11) Mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

Pursuant to Federal Rule (12) above, when federal funds are expended by TIPS OR ITS MEMBERS, TIPS OR ITS MEMBERS requires proposer certify that during the term of an award by the TIPS OR ITS MEMBERS resulting for this procurement process the vendor will be in compliance with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

Does vendor agree? YES mk Initial of Authorized Company Official

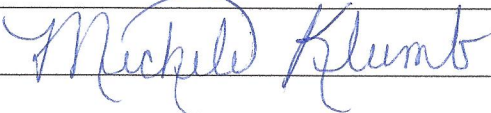
Federal Rule (12) 2 CFR §200.322 Procurement of recovered materials. A non-Federal entity that is a state agency or agency of a political subdivision of a state and its contractors must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines. [78 FR 78608, Dec. 26, 2013, as amended at 79 FR 75885, Dec. 19, 2014]

Pursuant to Federal Rule (12) above, when federal funds are expended by TIPS OR ITS MEMBERS, TIPS OR ITS MEMBERS requires proposer certify that during the term of an award by the TIPS OR ITS MEMBERS resulting for this procurement process the vendor will be in compliance with mandatory standards and policies relating to Procurement of recovered materials which are listed above.

Does vendor agree they will comply? YES mk Initial of Authorized Company Official

Company Name Stand2Learn

Print name of authorized representative Michele Klumb

Signature of authorized representative 

Date 9-7-15

Signature above acknowledges all provisions in this four page document and the vendor/proposer/bidder responses herein to the 12 rules.

SUSPENSION OR DEBARMENT CERTIFICATE

Non-Federal entities are prohibited from contracting with or making sub-awards under covered transactions to parties that are suspended or debarred or whose principals are suspended or debarred. Covered transactions include procurement for goods or services equal to or in excess of \$25,000.00. Contractors receiving individual awards for \$25,000.00 or more and all sub-recipients must certify that the organization and its principals are not suspended or debarred.

By submitting this offer and signing this certificate, this bidder:

Certifies that no suspension or disbarment is in place, which would preclude receiving a federally funded contract under the EDGAR, §200.212 Suspension and debarment.

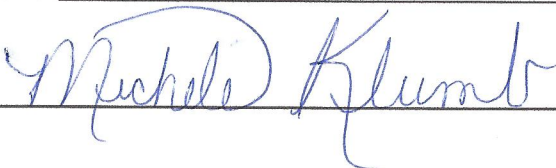
Vendor Name: _____ Stand2Learn _____

Vendor Address: _____ 5713 Shellbournes Hill, College Station, TX 77845 _____

Vendor E-mail Address: _____ michele.klumb@stand2learn.com _____

Vendor Telephone: _____ 214-785-2125 _____

Authorized Company Official's Name: _____ Michele Klumb _____

Signature of Company Official: _____  _____

Date: _____ 9-7-15 _____

References

**** Must have at least 3 References. References must be School, City, County, University, State Agency or Other Government.**

Organization	City	State	Contact Name	Contact Phone
Texas A&M HSC	College Station	Texas	John Zamora	979-436-9415
Earlham CSD	Earlham	Iowa	Superintendent Mike Wright	515-758-2213
A&M Consolidated	College Station	Texas	Principal Jeff Mann	979-764-5575
Royse City ISD	Royse City	Texas	Jo Nell Mellody	972-636-2413
Austin ISD	Austin	Texas	Kim Scannell	512-414-2123
College Station Police Department	College Station	Texas	Chief Jeff Capps	979.764.3600



WARRANTY

Stand2Learn™ extends warranty on products for 15 years from date of original purchase to the original purchaser. Stand2Learn™ warrants the products will be free of defects in material and workmanship. Product defects will be repaired or replaced with new or refurbished parts or products at the discretion of Stand2Learn™. All expenses related to the warranty of products, including installation, must be preapproved by Stand2Learn™. All warranty claims must be accompanied with a copy of the original invoice. Stand2Learn™ may require verification of defects including but not limited to pictures of the defect, site inspection, or sample product returned for inspection. Abuse and misuse of product will void any warranty. Normal wear and environmental factors are not covered under this warranty. Unapproved alterations, or alterations performed by an unauthorized individual shall void any warranty. All defective products must be removed from use, unless approved by Stand2Learn™. Stand2Learn™ will not be responsible for damages caused by the use of defective products. To the extent allowed by law, Stand2Learn™ makes no other warranty either expressed or implied, including any warranty of fitness for a particular purpose. Stand2Learn™ will not be liable for any consequential or incidental damages. Possible warranty claims need to be reported to Stand2Learn™ within 90 days of detection.

Care and Use Instructions:

Products should be used for their intended purpose and inspected on a regular basis to avoid structural failures and possible injury. Inspections should include verifying there are no loose or missing screws, rivets, or other fasteners. Products should also be inspected for cracks, fatigue, or broken welds. Products that have adjustability should be inspected to ensure the fasteners are installed and adjusted properly. Any product showing signs of damage or improper adjustment should be removed from service immediately and the furnishing dealer notified. Repairs should be made with factory authorized parts and methods.

*All products meet or exceed ANSI/BIFMA 5.1-2007 and conform to the CPSIA Section 102

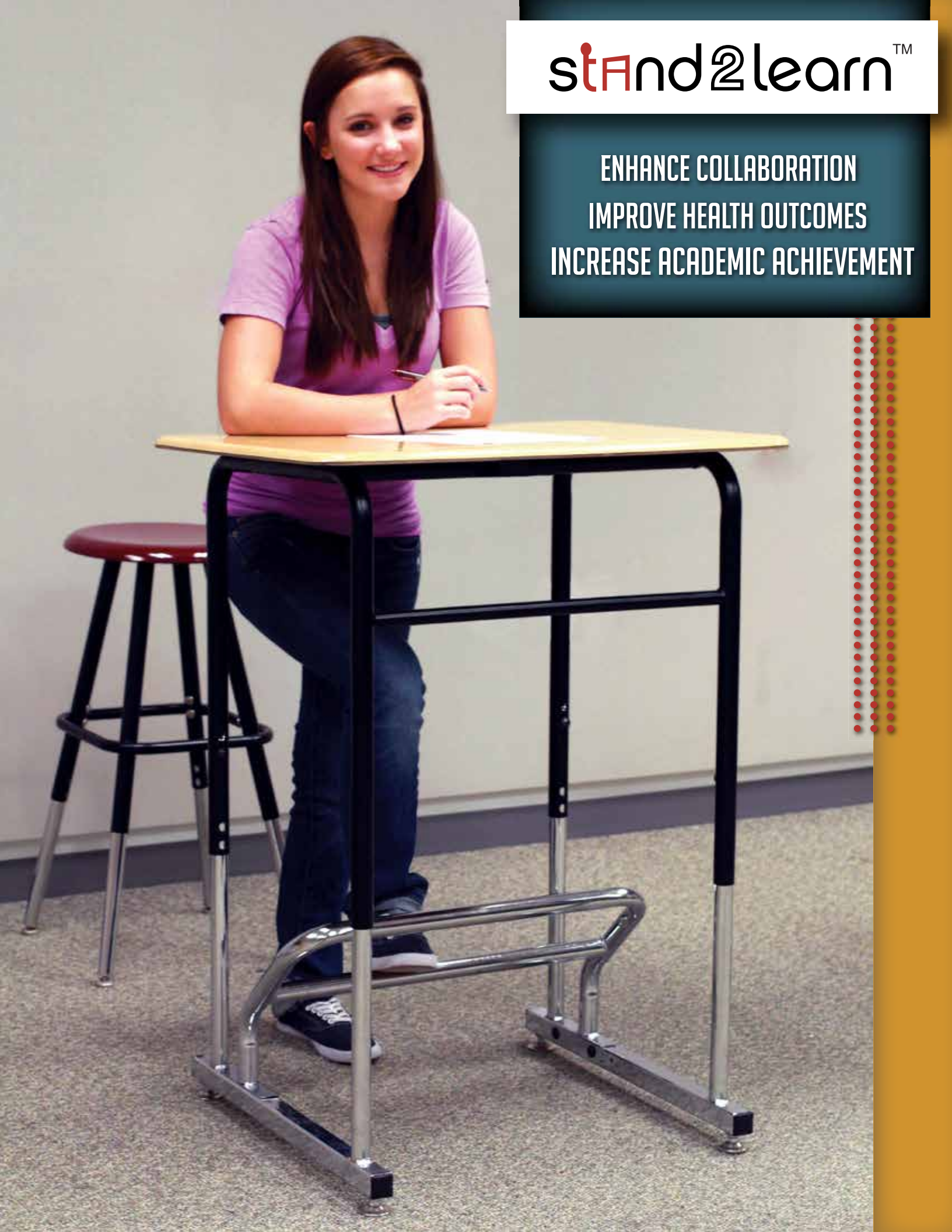
5713 Shellbourne's Hill, College Station, Texas 77845

P: 214-785-2125 F: 979-693-3333

www.Stand2Learn.com

stAnd2learn™

ENHANCE COLLABORATION
IMPROVE HEALTH OUTCOMES
INCREASE ACADEMIC ACHIEVEMENT



SIT OR STAND?

Why Stand-Biased design? – Dr. Mark E. Benden, CPE; comments – “Stand-Biased desks give students the maximum flexibility (**they choose to sit or stand at will**) and allows for the most movement and postural variety when participating in a learning environment”. Our research has shown that students benefit physically from the improved mobility and alertness that have direct carry-over impacts to their health and academic performance.

75% of students will choose to stand in a classroom environment rather than sit when given the option.

Students who are allowed to be more physically active outperform their peers in behavior and academics. Recent studies have shown engagement increases over 15% in dynamic classrooms.

Childhood obesity, the loss of play-time and the cancelation of PE are all of great concern to parents and educators. To date, the debate has been to choose between more class time or more physical activity – what if there was a solution that accomplished both? Children who work at Stand2Learn™ desks burn over 20% more calories per hour than their peers working at traditional desks.

Feedback from Teachers: More freedom of movement for the student equals easier classroom management. Students focus on instruction and not the discomfort of sitting in poorly-designed, hard plastic seats that rarely fit their growing bodies.

Stand2Learn™ is proud to be a faculty-led startup company that began in 2008 and traces its roots to research conducted in schools by primary through graduate level teachers.

stand2learn™

SMART DESIGN

HARD POLYMERIC TOP

This solid single surface won't scratch or dent over time. It includes a built-in pencil groove to complement the angled top that enhances reading and writing.

DURABLE STOOL

The round top with waterfall edge and surface texture for grip are coupled with four tubular steel legs that provide easy adjustability over the full range of student sizes.

STUDENT-CENTRIC DESIGN

Gentle contours on the edges and rounded corners coupled with soft bends in the 16 & 18 ga. steel frame ensures safety and comfort for all users.

EASILY ADJUSTABLE LEG HEIGHT

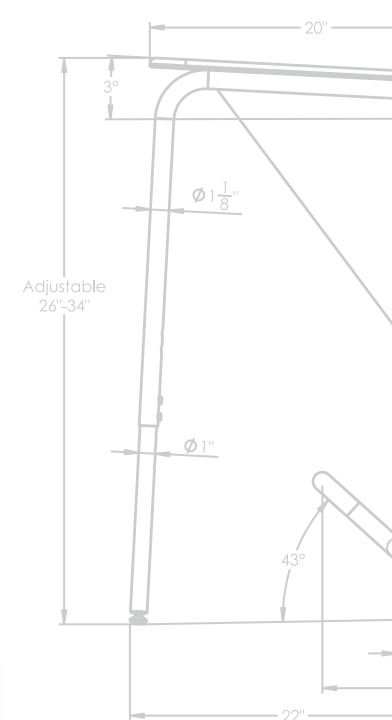
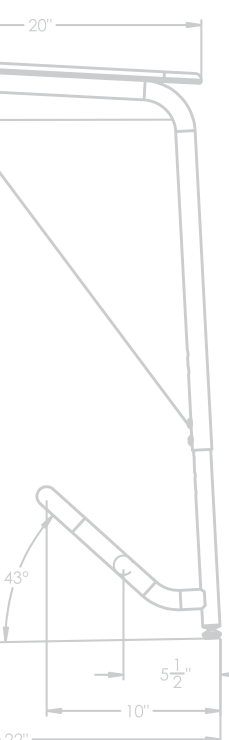
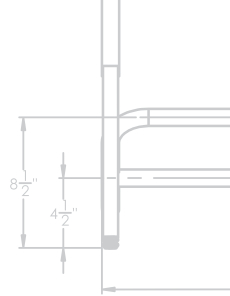
This desk will grow to meet any student or grade level requirement.

UNABSTRUCTURED VIEW

The open design provides clear view of the entire classroom.

DUAL LEVEL FOOTREST

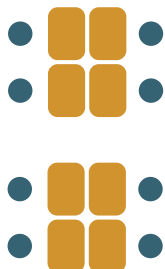
The footrest is the key to standing comfort. Our patented design utilizes multiple depths and two heights to support the users feet while sitting and standing. The chrome plating ensures lasting durability and easy maintenance.



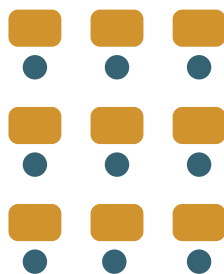
FLEXIBLE ROOM LAYOUT

Columns, Rows, Circles, Pods of 2, 4, or 8 are all part of the infinite list of optional layouts available to users of this innovative product.

PODS



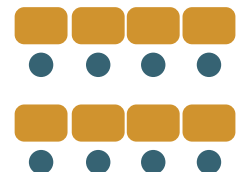
COLUMNS



U - SHAPE



ROWS





FOR ALL AGES

Our products cover kindergarten through college. Call us to specify a product that will meet your needs.



MODELS

K-4TH

K—4th grade Desk and Stool

Desk Height Range: 26" — 34"

Desk Top Dimensions: 20" Deep x 26" Wide

Footrest Height: 5" and 9"

Stool Height Range: 19" — 29"

Desk Model #S2LK04

Stool Model #S2LS04

5TH-16TH

5th — 16th grade Desk and Stool

Desk Height Range: 34" — 42"

Desk Top Dimensions: 22" Deep x 28" Wide

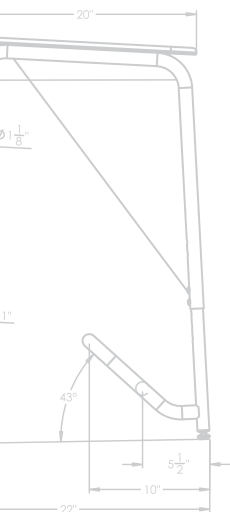
Footrest Height: 7" and 11" (adj. depth)

Stool Height Range: 23" — 33"

Desk Model #S2LK12

Stool Model #S2LS05

See Stand2Learn.com for desk top and stool top color selections.



ORDER NOW

stand2learn™

Call for **S2L™** pricing or visit our website for online purchasing options.

P | 214-785-2125 • F | 979-693-3333 • info@stand2learn.com • www.stand2learn.com

Limited Lifetime warranty • All products meet or exceed ANSI/BIFMA 5.1-2007 • CONFORMS WITH THE CPSIA SECTION 102

"Licensed design from the Texas A&M University System" US Patents #D649368 & #D649369 and other US Patents Pending

CONTRACT Signature Form

The undersigned hereby proposes and agrees to furnish goods and/or services in compliance with the terms, specifications and conditions at the prices quoted unless noted in writing. The undersigned further certifies that he or she is an authorized agent of the company and has authority to negotiate and contract for the company named below.

Company Name: Stand2Learn

Mailing Address: 5713 Shellbournes Hill

City: College Station

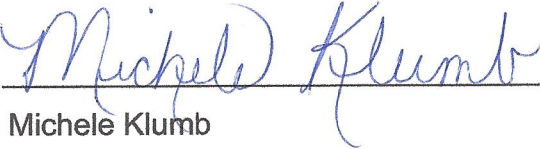
State: Texas

Zip: 77845

Telephone Number: (214) 785-2125

Fax Number: (979) 693-3333

Email Address: michele.klumb@stand2learn.com

Authorized Signature: 

Printed Name: Michele Klumb

Position: Vice President

This contract is for a total TERM of one year with the option of two additional years. Vendors shall honor the participation fee for any sales made based on the TIPS contract. Failure to pay the fee will be grounds for termination of contract and will affect the award of future contracts.

TIPS Authorized Signature

Date

Approved by Region VIII ESC

Date

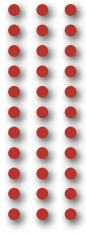
Collaboration Meets Function

Introducing the Y-ze two-student standing desks



From the company that brought you the first research-based, height-adjustable standing desks, Stand2Learn™ announces the launch of their new Y-ze desk series of designer-influenced, ergonomist-perfected and nature-inspired standing desks for schools. Available in tandem models for two students at lower per-student-cost or single-student models for greater classroom flexibility.

RESEARCH BASED DESIGN



UNABSTRUCTED VIEW
The open design provides clear view of the entire classroom.

BIOMIMETIC LEG DESIGN
Open design which aligns with student posture provides all-day comfort.

ADJUSTABLE GLIDES
2" of glide adjustment allow for easy leveling and a range of heights for each model.

DURABLE CONTOURED TOP
Soft rubber edge trim for comfort and available in multiple colors and finishes.

STUDENT-CENTRIC DESIGN
Gentle contours on the edges and rounded corners coupled with the 16 & 18 ga. steel frame ensures safety and comfort for all users.

DUAL LEVEL FOOTREST
The footrest is the key to standing comfort. Our patented design utilizes multiple depths and two heights to support the users feet while sitting and standing. The chrome plating ensures lasting durability and easy maintenance.

MODELS

K-4TH

DESK MODEL #S2LY25: 27" - 29" high
DESK MODEL #S2LY26: 32" - 34" high

BOTH MODELS have:
Desk Top Dimensions: 20" deep x 42" wide
Footrest Height: 5" and 9"

5TH-COLLEGE

DESK MODEL #S2LY27: 36" - 38" high
DESK MODEL #S2LY28: 40" - 42" high

BOTH MODELS have:
Desk Top Dimensions: 24" deep x 48" wide
Footrest Height: 7" and 11"

See Stand2Learn.com for desk top color selections.
Under-desk storage options and casters also available.



ORDER NOW

stand2learn™



Call for S2L® pricing or visit our website for purchasing options.

P | 800-641-7750 • F | 979-693-3333 • info@stand2learn.com • www.stand2learn.com

Limited Lifetime warranty • All products meet or exceed ANSI/BIFMA 5.1-2007 • CONFORMS WITH THE CPSIA SECTION 102

US Patents Pending

Introducing the Y-ze (wise) Desk

Improving engagement, collaboration, academics and health



From the company that brought you the first research-based, height-adjustable standing desks, Stand2Learn™ announces the launch of their new Y-ze desk series of designer-influenced, ergonomist-perfected and nature-inspired standing desks for schools. Available in sizes to accommodate elementary through college-level students.

RESEARCH BASED DESIGN



UNOBSTRUCTED VIEW
The open design provides clear view of the entire classroom.

BIOMIMETIC LEG DESIGN
Open design which aligns with student posture provides all-day comfort.

ADJUSTABLE GLIDES
2" of glide adjustment allow for easy leveling and a range of heights for each model.

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Soft edge for comfort and available in multiple colors and finishes.

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Gentle contours on the edges and rounded corners coupled with the 16 & 18 ga. steel frame ensures safety and comfort for all users.

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The footrest is the key to standing comfort. Our patented design utilizes multiple depths and two heights to support the users feet while sitting and standing. The chrome plating ensures lasting durability and easy maintenance.

MODELS

K-4TH

DESK MODEL #S2LY15: 27" - 29" high

DESK MODEL #S2LY16: 32" - 34" high

BOTH MODELS have:

Desk Top Dimensions: 20" deep x 26" wide

Footrest Height: 5" and 9"

5TH-COLLEGE

DESK MODEL #S2LY17: 36" - 38" high

DESK MODEL #S2LY18: 40" - 42" high

BOTH MODELS have:

Desk Top Dimensions: 22" deep x 28" wide

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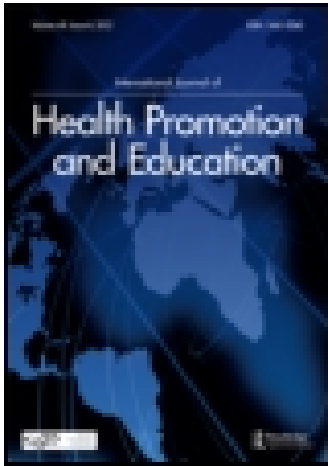


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The effect of stand-biased desks on academic engagement: an exploratory study

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Schools have been suggested as a viable avenue to combat childhood obesity. School administrators are sometimes faced with the conflicting demands of improving the health of their students and maintaining academic performance. Dynamic furniture such as stand-biased desks may be one way to address both academic and health demands placed on schools to prevent childhood obesity. Classrooms with stand-biased desks were compared with classrooms using traditional seated desks in 2nd, 3rd, and 4th grades. The academic engagement of 282 participants was observed in the fall and spring during one academic year. The engagement of the treatment classrooms was compared with the engagement of the control classrooms. Both groups showed general increases in their academic engagement over time. Stand-biased desks do not seem to result in adverse effects on academic engagement when used in elementary classrooms. The data suggest promising results for the use of stand-biased desks in elementary school classrooms. The results suggest that stand-biased desks can be introduced in the classroom to combat childhood obesity through increasing energy expenditure without affecting academic engagement.

Keywords: stand-biased desk; classroom design; academic engagement

In an effort to address childhood obesity there have been several interventions aimed at impacting children's level of physical activity and healthy eating behavior in the public school setting (Wechsler et al. 2000; Goran, Reynolds, and Lindquist 1999). Schools have been chosen as a target setting for obesity prevention and intervention due to the significant amount of time children spend in school (Wechsler et al. 2000). School administrators often struggle with managing conflicting demands surrounding the growing need for integrating healthy and active behaviors in the school setting with increasing the academic achievement and competitive standing of American children (Kahn et al. 2002). Recent research suggests that physical activity may have beneficial effects on cognitive ability and consequently academic achievement, thereby, encouraging the alignment of school-based efforts to meet students' health and educational needs (Hillman, Erickson, and Kramer 2008; Tomporowski et al. 2008).

Given the growing childhood obesity epidemic, health care professionals have suggested guidelines for reducing the prevalence of childhood obesity in the United States (Services USDoHaH 2000). In 2009–2010, obesity rates were as high as 16.9%, and rates for overweight children and adolescents aged 2–19 were 31.8% (body mass index (BMI) \geq 95th percentile and BMI \geq 85th percentile based on age and gender norms, respectively)

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(Ogden et al. 2012). More specifically, children between the ages of 6 and 11 show rates as high as 18% for obesity and 32.6% for overweight (Tompsonowski et al. 2008). The alarming rate of unhealthy weight for children is a relatively recent phenomenon. In the 1970s, the rate of obesity was as low as 5% in children and adolescents, but there has been an average increase of 3.7% per year between 1977 and 2008 in childhood obesity (Wang, Orleans, and Gortmaker 2012). The increase in BMI may be a result of the increasing sedentary lifestyle of children and adolescents (Cardon et al. 2004). For example, one study focusing on children in daycare facilities noted that preschool children spent 55% of their daycare time in sedentary activities, such as seated play (Bower et al. 2008). *Healthy People 2010* offered guidelines and recommendations to reduce the rate of childhood obesity back to the prevalence recorded in the 1970s (Hillman, Erickson, and Kramer 2008). Several interventions have been aimed at reducing the energy gap between energy intake and expenditure to combat sedentary behavior by increasing children's access to sports facilities in school or by limiting student access to calorie-dense foods in schools (Wechsler et al. 2000; Hillman, Erickson, and Kramer 2008; Tompsonowski et al. 2008; Story, Nanney, and Schwartz 2009). Although, there has been stabilization in the rate of increase each year, standards set by *Healthy People 2010* were not reached (Services USDoHaH 2000). In response, *Healthy People 2020* objectives were developed with the goal of reducing the prevalence rate of obesity recorded in 2008 by 5% for the year 2020, which would require an average reduction of 41 kcal/day for all children and adolescents, and specifically a reduction of 37 kcal/day for children 6 to 11 years old (Services USDoHaH 2000). There have been different opinions offered for how health professionals can achieve the *Healthy People 2020* goal. Wang suggests that reducing small amounts of daily caloric intake is a much more attainable goal than a massive reduction of caloric intake once a child reaches the obese category (Wang, Orleans, and Gortmaker 2012). Interventions targeted at schools, such as reducing the availability of sugar-sweetened beverages and implementing programs that decrease sedentary behavior, continue to be the most frequent suggested methods suggested for reaching the new standards set by *Healthy People 2020* (Wang, Orleans, and Gortmaker 2012). These interventions have demonstrated modest success in increasing energy expenditure in elementary school children (Goran, Reynolds, and Lindquist 1999; Kahn et al. 2002).

Several studies have shown that daily involvement in organized physical activity programs, such as physical education (PE), have resulted in reductions in BMI and decreases in body fat (Wechsler et al. 2000; Cardon et al. 2004; Bower et al. 2008; Story, Nanney, and Schwartz 2009; Sallis et al. 1997). For example, in a 2-year PE intervention, there was a significant increase in energy expenditure in children participating in an intervention group that replaced academic time with PE time (Sallis et al. 1997). In another study, an aerobic dance intervention with high school girls resulted in a significantly greater decrease in body weight, whereas body weight in the control group remained unchanged (Viskic-Stalec et al. 2007).

Due to concerns regarding loss of academic time as a result of greater involvement in PE classes and activities, numerous studies have investigated the positive effects of physical activity involvement on academic achievement and classroom behavior (Carlson et al. 2008; Coe et al. 2006; Nicholson et al. 2011; Sallis et al. 1999). Research with adults and animals has suggested that exercise results in an increase in oxygen levels to areas of the brain that support memory and learning (Hillman, Erickson, and Kramer 2008). Adults have shown improvements in cognitive functions such as processing speed and memory tasks, and animal research gives insight into which neural sights may be activated and nourished during physical activity. Tompsonowski et al. suggest that exercise has similar

cognitive effects for children (Tompsonowski et al. 2008). Other studies have shown that children that replace some percentage of their time spent in academic activities with physical activity have comparable levels of academic achievement to children that did not replace academic time with physical activity (Viskic-Stalec et al. 2007). These results suggest that physical activity might improve the efficiency of learning, but more importantly does not adversely impact academic achievement.

The effects of physical activity on classroom behavior and academic engagement have also been investigated. For example, children with autism spectrum disorders (ASD) were found to exhibit higher levels of classroom engagement following a 20-min aerobic exercise routine that preceded instruction (Nicholson et al. 2011). Providing further support for the positive effects of physical activity on student engagement, children that were deprived from recess for longer periods of time showed more inattention, as measured by gaze directed at the teacher during instructional time before recess (Pellegrini, Huberty, and Jones 1995). Collectively, data from studies measuring academic achievement and classroom engagement suggest that increasing physical activity in the school setting is an important way to combat sedentary behavior and to improve the physical health of children without compromising students' academic achievement.

To achieve the childhood obesity-related objectives set by *Healthy People 2020*, some researchers have suggested increasing the amount of movement in the classroom as a method of combating sedentary behaviors and increasing caloric expenditure in children (Ogden et al. 2012; Pellegrini, Huberty, and Jones 1995; Lanningham-Foster et al. 2008; Donnelly et al. 2009). Cardon et al. found that children in traditional seated classrooms spent, on average, 97% of their day seated (Cardon et al. 2004). By increasing non-exercise activity thermogenesis (NEAT), research suggests that children can expend small amounts of energy that will facilitate a meaningful increase in caloric expenditure (Naylor et al. 2008). NEAT is the small amount of energy expended while doing daily tasks such as walking, standing, working (Levine et al. 2006). Biddle et al. found that some children exhibit large amounts of active (moderate and vigorous) and sedentary behaviors throughout the day, thereby suggesting there is sufficient time for both activities in the day. He concluded that increasing moderate and vigorous physical activity alone may not be sufficient to target sedentary behavior (Biddle, Gorely, and Stensel 2004). Interventions aimed at making classrooms more active are favorable because they allow for direct replacement of sedentary behavior with active behavior. Increasing physical activity may also be beneficial for learning because it allows children to be physically active while academically engaged.

To increase activity in the classroom, student desks have been altered to allow children to expend more energy during instructional activities and academic assignments. One such alteration involves allowing children to stand at their desk (Benden et al. 2011, 2012, 2013; Koepf et al. 2012). Benden et al. have shown that stand-biased desks result in statistically significant improvements in the energy expenditure of children during the school day and cause no discomfort to students (Benden et al. 2011, 2012, 2013; Koepf et al. 2012; Blake, Benden, and Wendel 2012). Stand-biased desks also do not appear to adversely impact student achievement, as there have been no significant adverse changes in 6th grade students' academic achievement when stand-biased desks are installed in classrooms, suggesting that the desks are not distracting to children (Koepf et al. 2012). The extant literature suggests that stand-biased desks aimed at reducing sedentary behavior by replacing it with more active behaviors have positive health benefits for children. Although there appear to be no adverse effects of standing behavior on students' academic achievement, the extent to which standing might have positive effects on

students' academic engagement has been largely unexplored. In a qualitative study examining the utility of stand-biased desks and consumer's perspective (i.e., classroom teachers) on the usability of stand-biased desks, Blake et al. found that many teachers associated stand-biased desks with improvements in students' attention and focus (Blake, Benden, and Wendel 2012).

The purpose of this study is to investigate the effects of standing behavior on student engagement in elementary classrooms by comparing classrooms that adopted stand-biased desks to classrooms that utilized traditional seated desks and chairs. Given research suggesting that physical activity, even at low levels, may provide both physical and cognitive benefits to children, it is possible that these cognitive benefits may be attributable to students' increased ability to sustain attention because the children have an opportunity to expend excess energy through physical activity while maintaining cognitive focus on classroom tasks. This study is an exploratory study that seeks to investigate the possible relationship between physical activity and classroom engagement.

Methods

Subjects

The sample consisted of 282 2nd, 3rd, and 4th grade students from 3 schools that participated in a larger study on the physiological effects of a stand-biased desk intervention. Classroom teachers ($n = 24$) who were identified by the school principal as being willing to participate in the study were recruited for their classroom to participate in the study through an informational meeting of grade level teachers. The teacher consent rate was 100%. Parent consent for student participation in the study was obtained through methods consistent with Institutional Review Board procedures. Letters explaining the study and its purpose were sent home to parents within a general start-of-the-year packet sent with students in September. Parental consent was obtained following a presentation about the study during parent orientation meetings at the start of the school year. Descriptive statistics for the final study sample ($N = 282$) are shown in Table 1.

Instruments

Behavioral observations of students in schools (BOSS) (Shapiro 2010). The BOSS was administered to assess the frequency in which students displayed active engagement (e.g., answering a question, raising a hand, participating in active discussion), passive

Table 1. Baseline characteristics and behavior measures for students participating in the study, expressed in means (standard deviation) or percentages.

	Treatment, $n = 158$	Control, $n = 124$
Female (%)	51.27	55.28
Grade 2 (%)	35.44	43.55
Grade 3 (%)	45.57	33.87
Grade 4 (%)	18.99	22.58
Black (%)	11.54	14.17
Hispanic (%)	10.90	10.00
Asian (%)	5.77	10.00
White (%)	71.29	66.83
Total engagement	41.9 (7.4)	37.6 (9.1)

engagement (e.g., attentive toward the lesson but the child does not take an active role in instructional activities), and off-task behavior in class. The BOSS uses time-sampling to record the frequency of behaviors that students exhibit within a 15-s interval. For this study, each student was observed for 12 min on a single day (48 15-s intervals). The BOSS is intended for practicing clinicians as a diagnostic tool to aid in treatment planning, but has been used in several research studies with success and adequate reliability (Nicholson et al. 2011; Vile Junod et al. 2006; Volpe et al. 2005; Amato-Zech, Hoff, and Doepke 2006; DiPerna 2006). The BOSS is scored by counting the total number of behaviors observed in each category, and dividing each total by the total number of intervals the child was observed. For this study, students' total engagement in class was calculated by averaging students' passive and active engagement scores. The inter-observer reliability as measured by the intra-class correlation was adequate and ranged from 0.81 to 0.90 for the fall and spring semesters of a single academic year.

Procedures

Participating schools used a team approach for instruction, in which one teacher instructed Science and Math and the other taught English and Social Studies. This team-teaching required students to switch classrooms twice each day to receive their lesson from the appropriate teacher. To address this potential confounder, teams of teachers rather than individual teachers were randomly assigned to either the treatment or control condition. Stand-biased desks and stools were installed in the treatment classrooms before the start of the school year and adjusted to a standard height for students' age group. Once school started, the furniture was adjusted to the unique height of each student.

Before data collection, 10 undergraduate research assistants were trained in the BOSS observation protocol and scoring procedures using a standardized training protocol. Research assistants had to achieve a 90% coding accuracy of videoed classrooms in order to engage in live training within participating classrooms. Live observational training served two purposes: to increase research assistants' accuracy in observing participants' behavior and to help the student participants with becoming acclimated to the presence of observers. The observers were paired and assigned to a classroom team in each grade for each school. All observers were blinded to the purpose of the study. Observations were conducted over a 3-week period at each school. Target students were identified with the assistance of teachers and by having students wear nametags for the first few weeks of school. Observations were conducted twice per week in 90-min intervals in the mornings during instructional time in the fall and spring. Each participating student was observed for 12 min on 1 day in the fall and 1 day in the spring.

Data analysis

Before performing formal statistical analysis, descriptive statistics and frequency tables were analyzed to examine the demographic characteristics of the sample. Missing data were then documented and examined.

Behavior performance measures are often correlated among students in the same classroom due to the effects of shared environment, particularly the teacher. The data are measured longitudinally for each of the variables of interest, once in the fall and once in the spring semester. In order to account for both the nested and longitudinal nature of these data, a random effect model (Laird and Ware 1982), also known as a hierarchical linear model, was used to examine whether the stand-biased desks impacted students' academic

engagement. The child and classroom were included in the model as random effects. The fixed effects (covariates) include treatment assignment, time, interaction between treatment and time, and other baseline covariates such as gender, grade level, race/ethnicity, and their interaction with the treatment, if necessary. All data analyses were conducted using SAS statistical software.

Results

Among the 282 participants who had behavior measurements in the fall, 158 were assigned to the stand-biased desks (treatment group) and 124 were assigned to the traditional desks (i.e. control group). The average total engagement score is higher for the treatment than the control group for the fall. The mean and standard error plots for the total engaged time (avgTotEng), for different treatment groups at fall and spring are shown in [Figure 1](#).

The SAS procedure Proc Mixed was used for performing the main analysis, and results are shown in [Table 2](#). The treatment group exhibited greater levels of academic engagement than the control group in the fall, with a statistically significant difference of the average total engagement score of 4.21 ($p = 0.003$) noted. In the spring semester, the control group showed a greater increase in academic engagement relative to the treatment group. Although the treatment effect on academic engagement is attenuated somewhat in the spring, the treatment group still evidenced a greater academic engagement in the spring, with the difference of the score being $4.21 - 3.49 = 0.72$. Females have an

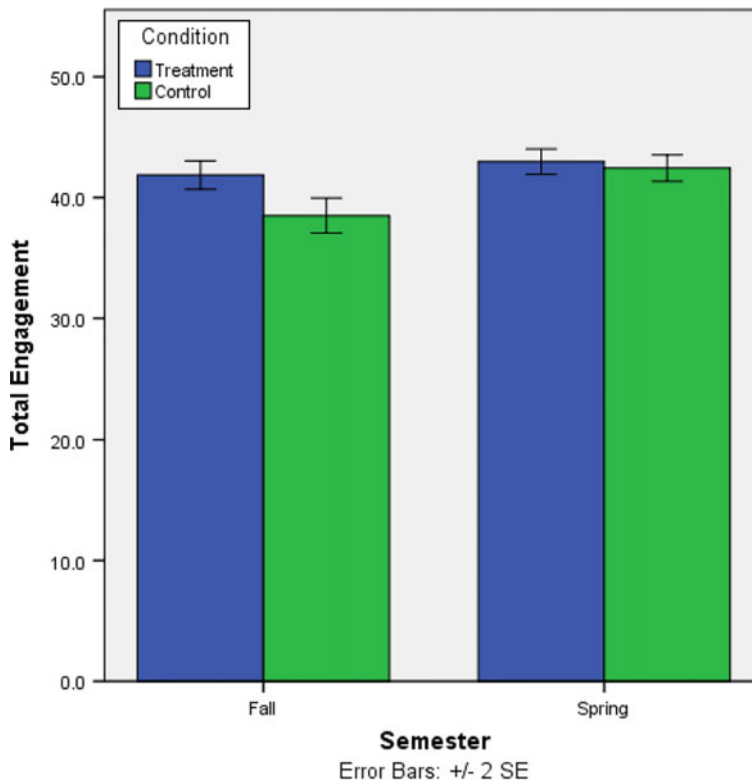


Figure 1. The means and standard errors for the total engaged time, at different times and for different groups.

Table 2. Results from mixed effect model examining the effects of covariates on the total engaged time.

Covariate	Coefficient	SE	P-value
Intercept	36.55	1.36	<0.0001
Treat	4.21	1.40	0.003
Time	4.70	0.87	<0.0001
Treat*time	-3.49	1.16	0.003
Female	2.07	0.61	0.0007
Black	-1.61	0.98	0.10
Hispanic	-0.18	1.03	0.86
Asian	2.04	1.18	0.09
Grade 2	-1.20	1.40	0.39
Grade 4	2.28	1.73	0.19

Note: White students are the reference group for racial/ethnic analyses.

estimated higher academic engagement score of 2.07 ($p = 0.0007$) than males. None of the other covariates were statistically significant; however, from the estimated coefficients, Black students exhibited lower levels of engagement than White students with the difference being 1.61 ($p = 0.10$). Hispanic students had similar scores of total engagement relative to White students, but Asian students had a higher engagement score of 2.04 than did White students ($p = 0.09$). Second graders' engagement score of 1.20 was lower than third graders ($p = 0.39$), and the fourth graders have a higher score of 2.28 than third graders ($p = 0.19$).

Discussion

Implications for school engagement

The purpose of this study was to examine the effect of stand-biased desks on student classroom engagement. The findings indicate that students provided with stand-biased desks did not decrease in their academic engagement in the classroom when compared with their seated counterparts. The significance of this finding is twofold. First, the effects of active classrooms on academic engagement and academic performance have been largely unexamined until now; thus, this research makes an important contribution to the existing knowledge base. Second, the results of this study document that the use of stand-biased desks in classrooms does not seem to disrupt students' level of engagement, allowing schools to address childhood obesity and energy expenditure without negatively academic performance. The study suggests that stand-biased desks do not create a distraction in the classroom with elementary school children, which extends the findings of Koepp et al. research (Koepp et al. 2012).

Limitations and future directions

Although careful consideration was given to the study design, results of this study should be evaluated in the context of study limitations. First, the student participants represented three grade levels from three schools in one suburban school district. While the participating schools were demographically diverse, additional research should examine effects in more rural and more metropolitan schools to enhance the generalizability of the findings. Second, students were observed for 2 days. Although it is possible that observing

students for this period may not have fully captured students' engagement behavior, this length of observation is common for clinical practice. However, future research should examine students' engagement over time and for longer intervals in order to be sure the level of engagement assessed provides an accurate reflection of student's academic engagement in class.

Conclusion

In conclusion, these findings yield promising results surrounding the use of stand-biased desks in elementary classrooms in that these desks do not appear to adversely affect students' academic engagement. Given research that suggests that stand-biased desks might be useful in combating childhood obesity, school health professionals might want to consider the incorporation of these desks in elementary classrooms to increase the physical health of students while also enhancing learning.

Human subjects approval statement

This study was approved by the Texas A&M Institutional Review Board and the review board of the participating school district.

Disclosure statement

No potential conflict of interest was reported by the authors.

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The Impact of Stand-Biased Desks in Classrooms on Calorie Expenditure in Children

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Childhood obesity is a public health concern with significant health and economic impacts. We conducted a prospective experimental study in 4 classrooms in central Texas to determine the effect of desks that encourage standing rather than sitting on caloric expenditure in children. Students were monitored with calorie expenditure-measuring arm-bands worn for 10 days in the fall and spring. The treatment group experienced significant increases in calorie expenditure over the control group, a finding that has implications for policy and practice. (*Am J Public Health*. Published online ahead of print March 17, 2011: e1–e4. doi:10.2105/AJPH.2010.300072)

A 2010 report released by the Trust for America's Health and the Robert Wood Johnson Foundation entitled *F as in Fat: How Obesity Threatens America's Future, 2010* states that the percentage of overweight and obese children is at or above 30% in 30 states.¹ The probability of obese children becoming obese adults is significantly higher than is the probability among their nonobese counterparts.^{2,3} Obese children who grow into obese adults also have more severe health risks than do individuals with adult-onset obesity, including potential for a shorter lifespan.^{4,5}

School-based physical activity programs and environmental changes have proven helpful in increasing health-enhancing physical activities for children.^{6–9} However, these activities typically concentrate on small portions of a child's day and miss the opportunity to increase

health-enhancing physical activities throughout the entire school day, particularly during instructional time. The pilot study described in this brief targeted childhood obesity by increasing passive calorie expenditure in the classroom. Classroom environments were modified to increase standing (rather than sitting) by replacing students' and teachers' traditional seated desks with standing height desks specifically manufactured for this study (Artco-Bell, Temple, TX); standing height stools were also provided to allow students to sit at their discretion. This concept biased the classroom environment toward standing, encouraging healthy movements, and increased energy expenditure.

METHODS

The intervention was pilot tested during the 2009 to 2010 school year in 4 first-grade classrooms in an ethnically diverse elementary school in central Texas; the treatment and control classrooms were randomly selected. All of the desks in the 2 treatment classrooms were converted to stand–sit workstations with stools, whereas the control classrooms remained unaltered for the entire school year. Students were told about the desks during the consent–assent process, and their teachers reinforced that they could stand or sit at their discretion. In addition to calorie expenditure, our study investigated children's standing activity after giving them no specific instruction that they must stand or sit for any portion of their day. By the 12th week of school after the treatment, students had acclimated to their desks; 70% of the students were not using stools at all, standing 100% of the time at their primary homeroom workstation, and the other 30% were standing, on average, approximately 75% of the time. Differences in energy expenditure for the most frequent users compared with the least frequent users of the standing position were not measured because the mean time standing for treatment classes was 91% of homeroom time.

Eighty students (20 each in 4 classrooms) were contacted for potential inclusion in the study. Parental consent and child assent were obtained at the beginning of the school year for 71 participants (58 completed the study by

recording complete data for both fall and spring data collections—31 from the treatment group and 27 from the control group). Every student in the treatment classrooms received the stand–sit desk; consent was solely for participation in the data collection activities. Those that did not consent were children whose parents who did not attend parent night and were unable to be reached in the 2 weeks afterward.

Data collected on each student included gender; age; initial and final height, weight, and body mass index (weight in kg divided by height in m²); body fat percentage; and calorie expenditure measured by the BodyBugg armband (Apex Fitness, Westlake Village, CA) worn on the upper left arm during the course of 5 consecutive school days at 4 intervals during the school year. The BodyBugg armband device is self-calibrating; takes frequent measurements, which reduces wear time needed to collect data; reports actual wear time of the device; can distinguish between different activities and their intensities; and, unlike an accelerometer-only device, does not require movement to acquire data on energy expenditure. This type of armband has been used in studies on children and adults; early validation studies on children resulted in modifications of the algorithm in the software to improve accuracy and validity.^{10–17} The current algorithm, adjusted on the basis of findings of 2007 and 2008 studies, incorporates height, weight, gender, age, and handedness of the wearer to assess caloric expenditure when combined with measurement of heat flux, temperature, galvanic skin response, and a 3-axis accelerometer. The reported average error in measurement of caloric expenditure for a variety of activities with the current algorithm is 1.7%, with a high degree of repeatability.¹²

We explored the longitudinal structure of the data collected in this study by using multilevel statistical models.¹⁸ Time was included as a continuous variable measured in hours where 0=baseline, 0.5=30 minutes, and 1=60 minutes. The lowest level of the data hierarchy (level 1) was the repeated measurements of calories burned per minute (y_{ij}) on each individual and the individuals themselves constituted the second level of the data hierarchy (level 2) as shown in the following equation:

$$\begin{aligned}
 (1) \ y_{ij} = & b_0 + b_1 \text{Time}_{ij} + b_2 \text{Treatment}_i \\
 & + b_3 \text{Treatment}_i \times \text{Time}_{ij} + b_4 \text{Treatment}_i \\
 & \times \text{Time}_{ij}^2 + b_5 \text{Treatment}_i \times \text{Time}_{ij}^3 \\
 & + u_{0i} \text{ (between participant residual} \\
 & \text{--random intercept)} + u_{1ij} \\
 & \times \text{Time}_{ij} \text{ (between participant residual} \\
 & \text{--random slope)} \\
 & + e_{ij} \text{ (within participant residual)}
 \end{aligned}$$

We accomplished model building by using a forward selection procedure in which powers of time were added 1 at a time to the base model including treatment group effects only. We then progressively added interaction terms between time and treatment effects and evaluated them with likelihood ratio tests.

RESULTS

Of the 13 students who did not complete the study, 4 left the study because of relocation in which the student was no longer attending the same school; these students did not differ from those who completed the study in any baseline measures. The other 9 students did not complete the study as a result of excessive absence and also did not differ from those who completed the study in any baseline measures.

Figure 1 displays lowess curves of the raw data for the calories burned per minute over time (8:00 AM–10:00 AM) for the treated and control groups. We selected the analysis time period noted in Figure 1 out of the full school day because this was the time of day when both groups were in their classrooms at their primary workstation doing the same tasks.

The results of the model presented in Table 1 indicate that the treatment group (n = 31) burned an average of 0.18 kilocalories per minute more than did the control group (n = 27; P = .022). Students in the treatment group burned 17% more calories than did those in the control group (treatment: mean initial weight = 25.2 kg; control: mean initial weight = 24.1 kg). Within the subset of participants over the 85th percentile in weight for their age and gender (treatment: mean initial weight = 30.3 kg [n = 12]; control: mean initial weight = 28.2 kg [n = 9]),¹⁹ children in the treatment group experienced a 32% increase in calorie expenditure compared with those in the

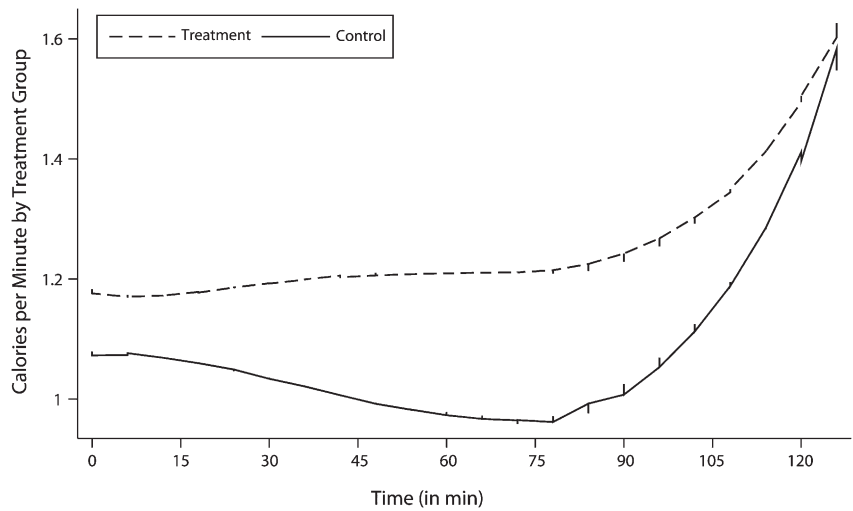


FIGURE 1—Lowess curves of the raw data for the calories burned per minute over time (8:00 AM–10:00 AM) among central Texas elementary school students using stand-biased desks versus control group: 2009–2010.

control group (1.56 kcal/min vs 1.18 kcal/min). (The mean weights are given to show how similar the controls were to the treatments in the 2 sets of classrooms, but not to indicate results of caloric expenditure.)

DISCUSSION

Although our results are limited because of sample size, they are promising and provide a basis for further research on cost-effectiveness

of stand–sit desks in preventing childhood obesity. The implementation cost of this intervention is relatively low; the stand–sit desk and stool units cost approximately 20% more than did the standard ones. Other than the initial investment, schools incur no ongoing costs and give up no instructional time. Further, interviews with teachers and parents of students in the treatment group indicated a positive effect on child behavior and classroom performance, which is supported by the

TABLE 1—Calories Burned per Minute Over Time Among Central Texas Elementary School Students Using Stand-Biased Desks Versus Control Group: 2009–2010

Model Parameter	b (SE)	Z	P	95% CI
Fixed effects				
b ₀ (intercept)	-338.815 (19.538)	-17.341	<.001	-377.110, -300.520
b ₁ (treatment)	0.182 (0.080)	2.287	.022	0.026, 0.338
b ₂ (treatment × time)	109.467 (6.161)	17.769	<.001	97.393, 121.542
b ₃ (treatment × time ²)	-11.729 (0.646)	-18.156	<.001	-12.995, -10.463
b ₄ (treatment × time ³)	0.418 (0.023)	18.552	<.001	0.374, 0.462
Random effects				
var(u _{1ij} × time _{ij})	0.001 (0.000)	2.167	.03	0.000, 0.001
var(u _{0i})	0.053 (0.022)	2.359	.018	0.023, 0.121
var(e _{ij})	0.120 (0.002)	54.730	<.001	0.116, 0.124

Note. CI = confidence interval. The time period during which data were collected was 8:00 AM to 10:00 AM.

literature.²⁰ The majority of parents (70%) whose children were in the treatment classrooms felt that standing in the classroom positively affected their child's classroom behavior. A teacher in one of the treatment classrooms stated:

When standing, the students were more focused, and I could keep their attention for longer. . . . I have one student with severe ADHD [attention-deficit/hyperactivity disorder], and this really helped him academically.

Additional research will also explore these effects, aiming to document academic incentives for schools to use stand-sit desks.

Our study contributes unique information to the knowledge base in that we used measures of caloric expenditure; other studies have measured only movement using an accelerometer.²¹⁻²³ Recent research into sedentary behaviors has indicated health outcomes beyond caloric expenditure for reducing seated time, including improved metabolic profiles, improvements in high-density lipoprotein production, lipoprotein lipase activity, and blood glucose control.²⁴⁻²⁷ In addition to these findings, Hamilton et al.^{28,29} reported that standing muscle activity causes isometric contraction of postural muscles, which produces electromyographic and skeletal muscle lipoprotein lipase changes resulting in additional biomarkers for health benefits. A larger longitudinal study is warranted that should examine students' in-school and out-of-school activity, as well as caloric consumption to ascertain whether the students compensate for the extra calories burned by altering other behaviors. If the stand-sit desks are found to have similar effects on a larger sample, this finding would have significant policy implications for schools, districts, states, and the country and could force us to rethink traditional classroom design. ■

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Contributors

M.E. Benden designed the study, led the implementation and data collection, and provided substantial content for the article. J. J. Blake developed the survey for parents and interview protocol for teachers, led the teacher data collection, and contributed to the writing of the article. M.L. Wendel led the parent survey data collection, assisted in interviewing teachers, and helped in the writing of the article. J.C. Huber assisted in the study design and conducted the main analysis of the student data; he also contributed to the analysis section of the article.

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Human Participant Protection

The study was approved by the institutional review board at Texas A&M University and the Research Review Board of the College Station Independent School District.

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