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MODULAR OUTDOOR CLASSROOM DESKS

Abstract

A set of modular classroom desks configured for outdoor use is presently described. Each classroom desk includes a bench seat; a table unit having a top surface; and first and second legs, each of which is coupled to both the bench seat and the table unit. The classroom desks of the set are configured to be releasably attached together in either a side-by-side orientation or a face-to-face orientation. In the side-by-side orientation, the top surfaces of the classroom desks form a planar seating surface. In the face-to-face orientation, the top surfaces of the classroom desks form a planar tabletop surface. In this manner, a number of classroom desks may be attached together, for instance to form a picnic table.

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Background/Summary

[0001] This application is a continuation of U.S. patent application Ser. No. 17/399,615, filed on Aug. 11, 2021, which claims priority to U.S. Provisional Patent Application No. 63/064,521, filed on Aug. 12, 2020, the entirety of which is incorporated by reference herein.

BACKGROUND

[0002] As the present COVID-19 pandemic continues, schools are increasingly looking for ways for make the classroom experience safer for teachers and students alike. One option that is available in some regions is the use of outdoor classroom spaces. Most schools, however, are not presently equipped with outdoor classroom furnishings. In fact, most schools at best have picnic tables in outdoor locations. While useful for lunch and recreational activities, those picnic tables are less than ideal for use in an outdoor classroom. Embodiments of the present invention are directed to desks having a variety of features that render them particularly suitable for an outdoor classroom.

[0003] While some outdoor classrooms may be maintained and used regularly beyond the present pandemic, it is also expected that many outdoor classrooms will only be used in special circumstances, e.g. a pandemic, damage to a classroom building, a major renovation project, etc. Accordingly, embodiments of the present invention are directed to modular outdoor desks that may be converted from classroom desks into a picnic table, thereby providing a school or municipality with a useful structure even when the desks are not needed for an outdoor classroom.

SUMMARY OF THE INVENTION

[0004] Embodiments of the present disclosure are directed to a classroom desk or a set of classroom desks configured for outdoor use. Each classroom desk includes a seat, such as a bench seat; a table unit having a top, working surface; a first leg coupled to both the seat and the table unit and having a portion that rests on a ground surface; and a second leg coupled to both the seat and the table unit and having a portion that rests on a ground surface. The first and second legs may support the seat and the table unit at desired heights and at a desired distance from one another to provide a comfortable reading and writing environment. Desirably, the first and second legs are located at opposite sides of the classroom desk, so that a student seated on the seat will have adequate room to place his or her legs between the first and second legs.

[0005] In some embodiments, the classroom desks may be modular. For instance, in some embodiments, a first classroom desk and a second classroom desk may be configured to be releasably attached together in either (1) a side-by-side orientation, in which the top surface of the first classroom desk and the top surface of the second classroom desk form a planar tabletop surface, and the bench seat of the first classroom desk and the bench seat of the second classroom desk form a planar seating surface, or (2) a face-to-face orientation, in which the top surface of the first classroom desk and the top surface of the second classroom desk form a planar tabletop surface. In this way, classroom desks may be arranged as needed or desired to best fit a given outdoor classroom space.

[0006] In some embodiments, the classroom desks may also be configured so that four or more desks may be attached together to form a picnic table that looks and operates like a conventional rectangular picnic table. For instance, a first desk and a second desk may be attached in a side-by-side orientation in which a seat of the first classroom desk and a seat of the second classroom desk

form a first planar seating surface. Similarly, the third desk and the fourth desk may be attached in a side-by-side orientation in which a seat of the third classroom desk and a seat of the fourth classroom desk form a second planar seating surface. The first desk and the third desk may be attached in a face-to-face orientation and the second desk and the fourth desk may be attached in a face-to-face orientation. In this way, the top surface of the first classroom desk, the top surface of the second classroom desk, the top surface of the third classroom desk, and the top surface of the fourth classroom desk may together form a table having a planar tabletop surface, with the first and second planar seating surfaces being located on opposite sides of the table, as in a conventional picnic table.

[0007] In some embodiments, two classroom desks—i.e., first and second classroom desks—may be configured to be secured together in a face-to-face orientation. For example, each table unit may comprise a front face having one or more apertures configured to receive one or more fasteners. When placed in a face-to-face relationship, at least one of the one or more apertures in the front face of the table unit of a first classroom desk may be aligned with at least one of the one or more apertures in the front face of the table unit of a second classroom desk. A fastener, e.g. a bolt, a screw, a clip, or the like, may be inserted through the aligned apertures, thereby securing the table unit of the first classroom desk and the table unit of the second classroom desk together. Alternatively, first and second classroom desks may be configured to be secured together in a faceto-face orientation through one or more connectors, such as clips, clamps, latches, swivel locks, magnetic connectors, the combination of a male connector and a female connector, etc. The connectors may be built-in, e.g. permanently attached to or integral with an element of the first and/or second classroom desk, such as the front face of the table unit, the underside of the table unit, or the first and second legs, or attachable to elements of the first and second classroom desks, such as the front faces of the table units, the undersides of the table units, and/or the first and second legs of each classroom desk.

[0008] In some embodiments, an optional front shield may be included at the front of a classroom desk. This front shield may also operate as a front divider when installed between first and second classroom desks arranged in a face-to-face orientation. The front shield/divider may comprise a plastic sheet material that extends upward of the table unit of the classroom desk or the tabletop surface formed by the table units of the first and second classroom desks. The front shield/divider may be made of a transparent material, such as polycarbonate, polymethyl methacrylate (Plexiglass®), or the like. The front shield/divider may be useful for purposes of social distancing, such as during a pandemic. In some embodiments, the front shield/divider may also be configured to be used in learning and/or artistic activities, e.g. as a dry-erase board.

[0009] The front shield/divider may be secured to the front of a table unit in much the same way that the table units of two classroom desks may be secured in a face-to-face orientation. For instance, the front shield/divider may have one or more apertures that are configured to receive one or more fasteners. When the shield/divider is attached to the front of a single classroom desk, one or more apertures in the front shield may be aligned with one or more apertures in the front face of the table unit and then a fastener, e.g. a bolt, a screw, a clip, or the like, may be inserted through each of the aligned apertures, thereby securing the front shield to the table unit of the classroom desk. Alternatively, in other embodiments, the shield/divider may be secured to the front of the table unit using one or more connectors, such as clips, clamps, latches, swivel locks, magnetic connectors, the combination of a male connector and a female connector, etc.

[0010] When the shield/divider is attached between the table units of two classroom desks, one or more apertures in the front divider may be aligned with one or more apertures in the front face of the table unit of the first classroom desk and one or more apertures in the front face of the table unit of the second classroom desk. A fastener, e.g. a bolt, a screw, a clip, or the like, may then be inserted through each of the aligned apertures, thereby securing the table unit of the first classroom desk and the table unit of the second classroom desk together, with the front divider sandwiched

and secured between the two table units. Alternatively, in other embodiments, the shield/divider may be secured to the two table units using one or more connectors, such as clips, clamps, latches, swivel locks, magnetic connectors, the combination of a male connector and a female connector, etc.

[0011] In some embodiments, two or more classroom desks—e.g. first and second classroom desks —may be configured to be secured together in a side-by-side orientation. For example, each table unit may have a side face with one or more apertures configured to receive one or more fasteners. When attached in a side-by-side orientation, one or more apertures in the side face of the table unit of the first classroom desk may be aligned with one of the one or more apertures in the side face of the table unit of the second classroom desk. A fastener, e.g. a bolt, a screw, a clip, or the like, may be inserted through each of the aligned apertures, thereby securing the table unit of the first classroom desk and the table unit of the second classroom desk together. Alternatively, first and second classroom desks may be configured to be secured together in a side-by-side orientation through one or more connectors, such as clips, clamps, latches, swivel locks, magnetic connectors, the combination of a male connector and a female connector, etc. The connectors may be built-in, e.g. permanently attached to or integral with an element of the first and/or second classroom desk, such as the side face of the table unit, the underside of the table unit, or at least one of the legs, or attachable to elements of the first and second classroom desks, such as the side faces of the table units, the undersides of the table units, and/or at least one of the legs of each classroom desk. [0012] Additionally or alternatively, each seat may have a side face with one or more apertures configured to receive one or more fasteners. When attached in a side-by-side orientation, one or more apertures in the side face of the seat of the first classroom desk may be aligned with one or more apertures in the side face of the seat of the second classroom desk. A fastener, e.g. a bolt, a screw, a clip, or the like, may be inserted through each of the aligned apertures, thereby securing the seat of the first classroom desk and the seat of the second classroom desk together. Alternatively, first and second classroom desks may be configured to be secured together in a sideby-side orientation through one or more connectors, such as clips, clamps, latches, swivel locks, magnetic connectors, the combination of a male connector and a female connector, etc. The connectors may be built-in, e.g. permanently attached to or integral with an element of the first and/or second classroom desk, such as the side face of the bench seat, the underside of the bench seat, or at least one of the legs, or attachable to elements of the first and second classroom desks, such as the side faces of the bench seat, the undersides of the bench seats, and/or at least one of the legs of each classroom desk.

[0013] In some embodiments, an optional side shield may be included at the side of a classroom desk. This side shield may also operate as a side divider when installed between first and second classroom desks arranged in a side-by-side orientation. The side shield/divider may comprise a plastic sheet material that extends upward of the table unit of the classroom desk or the tabletop surface formed by the table units of the first and second classroom desks. The side shield/divider may also extend above the seat of the classroom desk or the planar seating surface formed by the seats of the first and second classroom desks. Indeed, in some embodiments, the side shield/divider may even extend rearward of the seat of the classroom desk or the planar seating surface formed by the seats of the first and second classroom desks. The side shield/divider may be made of a transparent material, such as polycarbonate, polymethyl methacrylate (Plexiglass®), or the like. The side shield/divider may be useful for purposes of social distancing, such as during a pandemic. In some embodiments, the side shield/divider may also be configured to be used in learning and/or artistic activities, e.g. as a dry-erase board.

[0014] The side shield/divider may be secured to the side of a classroom desk in much the same way that the table units and/or seats of two classroom desks may be secured in a side-by-side orientation. For instance, the side shield/divider may have one or more apertures that are configured to receive one or more fasteners. When the shield/divider is attached to the side of a

single classroom desk, one or more apertures in the side shield may be aligned with one or more apertures in the side face of the table unit and/or one or more apertures in the side face of the seat and then a fastener, e.g. a bolt, a screw, a clip, or the like, may be inserted through the aligned apertures, thereby securing the side shield to the table unit and/or the seat of the classroom desk. Alternatively, in other embodiments, the shield/divider may be secured to the side of the table unit and/or the side of the seat using one or more connectors, such as clips, clamps, latches, swivel locks, magnetic connectors, the combination of a male connector and a female connector, etc. [0015] When the shield/divider is attached between two classroom desks, one or more apertures in the side divider may be aligned with (1) one or more apertures in the side face of the table unit of the first classroom desk and one or more apertures in the side face of the table unit of the second classroom desk, (2) one or more apertures in the side face of the seat of the first classroom desk and one or more apertures in the side face of the seat of the second classroom desk, or (3) both (1) and (2). A fastener, e.g. a bolt, a screw, a clip, or the like, may then be inserted through each of the aligned apertures, thereby securing the first classroom desk and the second classroom desk together with the side divider sandwiched and secured between the two table units, the two seats, or both. Alternatively, in other embodiments, the shield/divider may be secured to the two table units, the two seats, or both using one or more connectors, such as clips, clamps, latches, swivel locks, magnetic connectors, the combination of a male connector and a female connector, etc. [0016] In some embodiments, a classroom desk may comprise a removable writing surface that is releasably attachable to the table unit and which covers at least a portion of the top surface of the table unit.

[0017] In some embodiments, and particularly where a set of classroom desks are configured to be assembled together to form a picnic table, the table unit of the classroom desks may have a plurality of apertures. For example, the table unit and the seat of a classroom desk may each be made from a coated perforated material, such as a perforated sheet steel that is coated with a weather-resistant and thermal insulating material such as PVC or TPV. The apertures provide drainage while the coating provides weather resistance. The coating may also be selected from a variety of colors, allowing for the creation of classroom desks having a school's official color or colors. In other embodiments, the table unit and the seat may each be made from a heavy duty plastic such as high-density polyethylene (HDPE) or the like and provided with drainage apertures. [0018] While this tabletop surface may be ideal when the desks are assembled to form a picnic table, however, it is far less suitable for use as a writing surface. A removable writing surface, in contrast, may have a smooth, continuous upper surface that is ideal for writing. The removable writing surface may also be weather-resistant. For example, in some embodiments, the removable writing surface may be made of a powder-coated sheet steel or a heavy-duty plastic such as high density polyethylene (HDPE) or the like. The removable writing surface may be attached to the table unit when desired and removed from the table unit when not desired. [0019] The removable writing surface may be releasably attached to the table unit in any of a variety of manners. In some embodiments, the writing surface may comprise an upper surface, a first side face extending downward from the upper surface, and a second side face extending downward from the upper surface. Each of the first side face and the second side face may include one or more connection elements by which the writing surface is securable to the table unit. For instance, at least one, and desirably each of the first side face and the second side face may comprise one or more clips that clip onto the respective side face of the table unit. Or at least one, and desirably each, of the first side face and the second side face may include one or more apertures which are configured to align with one or more apertures in the respective side face of the table unit and receive a fastener. In other embodiments, the removable writing surface may be secured to the table unit using one or more connectors, such as clamps, latches, swivel locks, magnetic connectors, the combination of a male connector and a female connector, etc. [0020] In some embodiments, the writing surface may comprise an upper surface, a front face

extending downward from the upper surface, and a rear face extending downward from the upper surface. Each of the front face and the rear face may include one or more connection elements by which the writing surface is securable to the table unit. For instance, at least one, and desirably each, of the front face and the rear face may comprise one or more clips that clip onto the respective front and/or rear face of the table unit. Or at least one, and desirably each, of the front face and the rear face may include one or more apertures which are configured to align with one or more apertures in the respective front and/or rear faces of the table unit and receive a fastener. [0021] In some embodiments, the classroom desk may comprise a backrest. In some embodiments, the backrest may be integral with or permanently secured to the bench seat. In some embodiments, however, the backrest may be removable. For instance, the backrest may comprise a frame element that may be affixed to the underside of the bench seat.

[0022] In some embodiments, the backrest of a first classroom desk may be configured to be secured to the backrest of a second classroom desk when the first and second desks are placed in a side-by-side orientation. This may be in addition or as an alternative to the securement of the table units and/or the bench seats of the first and second classroom desks, as described above. [0023] For example, each backrest may have a side face with one or more apertures configured to receive one or more fasteners. When attached in a side-by-side orientation, one or more apertures in the side face of the backrest of the first classroom desk may be aligned with one or more apertures in the side face of the backrest of the second classroom desk. A fastener, e.g. a bolt, a screw, a clip, or the like, may be inserted through each of the aligned apertures, thereby securing the backrest of the first classroom desk and the backrest of the second classroom desk together. Alternatively, the backrests of first and second classroom desks may be configured to be secured together in a side-by-side orientation through one or more connectors, such as clips, clamps, latches, swivel locks, magnetic connectors, the combination of a male connector and a female connector, etc. The connectors may be built-in, e.g. permanently attached to or integral with an element of the first and/or second classroom desk, such as the side face of the backrest, the rear side of the backrest, or at least one of the connectors by which the backrest is connected to the bench seat, or attachable to elements of the first and second classroom desks, such as the side faces of the backrests, the undersides of the backrests, and/or at least one of the connectors by which the backrests are connected to the bench seats.

[0024] In some embodiments, the side shield/divider may be secured to the side of a backrest. This may be in addition or as an alternative to the securement of the side shield/divider to the table unit and/or the bench seat of a classroom desk, as described above.

[0025] For instance, the side shield/divider may have one or more apertures that are configured to receive one or more fasteners. When the shield/divider is attached to the side of a single classroom desk, one or more apertures in the side shield may be aligned with one or more apertures in the side face of the table unit and/or one or more apertures in the side face of the seat and/or one or more apertures in the side face of the backrest and then a fastener, e.g. a bolt, a screw, a clip, or the like, may be inserted through each of the aligned apertures, thereby securing the side shield to the table unit and/or the seat and/or the backrest of the classroom desk. Alternatively, in other embodiments, the shield/divider may be secured to the table unit and/or the seat and/or the backrest using one or more connectors, such as clips, clamps, latches, swivel locks, magnetic connectors, the combination of a male connector and a female connector, etc.

[0026] When the shield/divider is attached between two classroom desks, one or more apertures in the side divider may be aligned with (1) one or more apertures in the side face of the table unit of the first classroom desk and one or more apertures in the side face of the table unit of the second classroom desk, (2) one or more apertures in the side face of the seat of the first classroom desk and one or more apertures in the side face of the backrest of the first classroom desk and one or more apertures in the side face of the backrest of the first classroom desk and one or more apertures in the side face of the backrest of the second classroom desk, or (4) any combination of (1) through

(3). A fastener, e.g. a bolt, a screw, a clip, or the like, may then be inserted through each of the aligned apertures, thereby securing the first classroom desk and the second classroom desk together with the side divider sandwiched and secured between the two table units, the two seats, the two backrest, or any combination thereof. Alternatively, the shield/divider may be secured to the table units and/or the seats and/or the backrests of the first and second classroom desks using one or more connectors, such as clips, clamps, latches, swivel locks, magnetic connectors, the combination of a male connector and a female connector, etc. Alternatively, the side shield/divider may simply be sandwiched between the backrests of the first and second classroom desks. [0027] In some embodiments, the classroom desk may also be configured to be usable by a student in a wheelchair without having to exit the wheelchair. For instance, the front of the classroom desk, i.e. the side opposite the bench seat, may be configured to accept a wheelchair. In some embodiments, therefore, the distance between the first leg and the second leg, i.e. the width, may be at least 30 inches (760 mm). Similarly, in some embodiments, the distance between the bottom surfaces of the first and second legs, which rest on a ground surface, and the underside of the table unit may be at least 27 inches (685 mm). In some embodiments, the distance between the bottom surfaces of the first and second legs, which rest on a ground surface, and the upper surface of the table unit may be 34 inches (864 mm) or less, alternatively 30 inches (760 mm) or less. For example, in some embodiments the distance between the bottom surfaces of the first and second legs, which rest on a ground surface, and the upper surface of the table unit may be between 27 inches and 34 inches, alternatively between 28 inches and 34 inches, alternatively between 27 inches and 30 inches, alternatively between 28 inches and 30 inches.

Description

BRIEF DESCRIPTION OF THE DRAWINGS

[0028] A clear conception of the advantages and features of one or more embodiments will become more readily apparent by reference to the exemplary, and therefore non-limiting, embodiments illustrated in the drawings:

[0029] FIG. **1** is a rear perspective view of an embodiment of an outdoor classroom desk of the present disclosure.

[0030] FIG. **2** is an exploded front perspective view of an embodiment of an outdoor classroom desk of the present disclosure, including a removable writing surface, a removable transparent front divider, a removable transparent side divider, and a removable backrest.

[0031] FIG. **3** is a perspective view of an embodiment of two outdoor classroom desks of the present disclosure attached in a face-to-face orientation, and including a transparent front divider.

[0032] FIG. **4** is a perspective view of an embodiment of two outdoor classroom desks of the present disclosure attached in a side-by-side orientation, and including a transparent side divider.

[0033] FIG. **5** is a perspective view of an embodiment of four outdoor classroom desks of the present disclosure attached in a picnic table orientation, and including transparent front and side dividers and backrests.

[0034] FIG. **6** is a perspective view of an embodiment of four outdoor classroom desks of the present disclosure attached together to form a picnic table.

[0035] FIG. **7** is a front perspective view of an embodiment of an outdoor classroom desk of the present disclosure, showing a side opposite from a bench seat being configured to receive a wheelchair.

DETAILED DESCRIPTION OF THE INVENTION

[0036] Embodiments of the present disclosure are directed to a modular outdoor classroom desk **10** and/or to a set of such desks. One such embodiment is shown, for example, in FIGS. **1** to **6**. The illustrated embodiment of the classroom desk includes a bench seat **11**, a table unit **12** having a top

surface **13**, a first leg **14** coupled to both the seat and the table unit and having a portion that rests on a ground surface, and a second leg **15** coupled to both the seat and the table unit and having a portion that rests on a ground surface.

[0037] The bench seat **11** comprises an upper surface **41**, on which a student sits, an underside, to which various connectors and other elements may be attached, and a flange that extends downward from the upper surface and that defines a front face **42**, a rear face **43**, and a pair of side faces **44**. Each side face **44** may comprise one or more apertures **45**, which may be used to attach a side shield and/or another classroom desks **10** in a side-by-side orientation, as described herein. [0038] The table unit **12** comprises an upper surface **13** (also referred to as a top surface), an underside, to which various connectors and other elements may be attached, and a flange that extends downward from the upper surface and that defines a front face **52**, a rear face **53**, and a pair of side faces **54**. Each side face **54** may comprise one or more apertures **55**, which may be used to attach a side shield and/or another classroom desk **10** in a side-by-side orientation, as described herein. Similarly, each front face **52** may comprise one or more apertures **56**, which may be used to attach a front shield and/or another classroom desk **10** in a face-to-face orientation, as described herein.

[0039] The bench seat **11** and the table unit **12** may be made of the same material or different materials. In some embodiments, including that illustrated in FIG. **1**, the bench seat **11** and the table unit **12** are made of perforated sheet steel coated with a weather-resistant and thermal insulated PVC or TPV coating. In other embodiments, however, one or more of the bench seat **11** and the table unit **12** may be made of a different material, such as another metal or a heavy duty plastic material, such as high density polyethylene (HDPE). The coating or the plastic material may be provided in any of a variety of colors, meaning that the bench seat **11** and the table unit **12** may be either the same color or different colors.

[0040] The bench seat **11** may be provided with one or more apertures **16** running through it to allow for drainage. As shown in FIG. **1**, for example, the bench seat **11** of the illustrated embodiment comprises a plurality of small apertures **16**—here perforations—running through it. The table unit **12**, and more particularly the top surface **13**, may similarly be provided with one or more apertures **17** running through it to allow for drainage. As shown in FIG. **2**, for example, the top surface **13** of the table unit **12** of the illustrated embodiment comprises a plurality of small apertures **17**—here perforations—running through it. In other embodiments, no such apertures may be present.

[0041] The first leg **14** and the second leg **15** connect the bench seat **11** and the table unit **12**. In the illustrated embodiment, for example, the each leg **14**, **15** comprises a first end coupled to the underside of the bench seat **11** and a second end coupled to the underside of the table unit **12**. Each leg also has a generally horizontal portion that separates the bench seat **11** and the table unit **12** and that rests on a ground surface. The generally horizontal portion may be secured to the ground surface, thereby fixing the classroom desk **10** in an identified location, such as is shown in FIG. **1**. However in other instances, it may be desirable to allow the classroom desk **10** to be moved around, in which case the legs **14**, **15** may be left unsecured. In other, non-illustrated embodiments, each of the first and second legs **14**, **15** may comprise wheels which enable the classroom desk **10** to be wheeled to a desired location. The wheels may include conventional wheel locks, of the sort that would be understood by a person of skill in the art, by which the desk **10** may be locked in place at a desired location.

[0042] In other embodiments, a single, e.g. central, leg may connect the bench seat **11** and the table unit **12**. In such embodiments, the leg may have a plurality of feet or other elements that extend outward from the leg to provide stability.

[0043] As shown in the illustrated embodiment, the first and second legs **14**, **15** may be made of powder-coated metal, such as powder-coated steel. However, the first and second legs **14**, **15** may be made of any of a variety of materials and take on a variety of configurations. They are not

limited to the materials or design shown in the illustrated embodiment.

[0044] The first and second legs **14**, **15** are spaced apart a desired distance to provide for an occupant of the seat to have adequate leg room. Similarly, the first and second legs **14**, **15** support the bench seat **11** and the table unit **12** at desired heights to provide a suitable and comfortable working environment. In some embodiments, the classroom desk **10** may be configured to be usable by a student in a wheelchair. For instance, the front of the classroom desk **10**, i.e. the side opposite the bench seat **11**, may be configured to accept a wheelchair. In such embodiments, the distance between the first leg and the second leg **14**, **15** may be at least 30 inches (760 mm). Similarly, in those embodiments, the distance between the bottom surfaces of the first and second legs **14**, **15**, which rest on a ground surface, and the underside of the table unit **12** may be at least 27 inches (685 mm).

[0045] The classroom desk **10** may also have a backrest **18**. In some embodiments, such as that illustrated, the backrest **18** may be removable.

[0046] The backrest 18 comprises a front surface 61, on which a student rests his or her back, a rear side 62, to which various connectors and other elements may be attached, and a flange that extends rearward from the front surface 61 and that defines a top face, a bottom face, and a pair of side faces 64. Each side face 64 may comprise one or more apertures 65, which may be used to attach a side shield and/or another classroom desk 10 in a side-by-side orientation, as described herein. [0047] The backrest 18 may comprise one or more frame elements 19 that connect the backrest to the bench seat 11. As illustrated, for example, a first end of each frame element 19 may be attached to the rear 62 of the backrest 18 and a second end of each frame element may be releasably attached to the underside of the bench seat 11. For example, the second end of each frame element 19 may have one or more mounting elements 20, each of which comprises one or more apertures configured to receive a fastener, e.g. a bolt, screw, clip, or the like, which secures the frame element to the underside of the bench seat 11. If one desires to remove the backrest 18, one simply need remove the fasteners.

[0048] In other, non-illustrated embodiments, the backrest **18** may be configured to be permanently connected to the bench seat **11**, or the bench seat and the backrest may be integral.

[0049] The backrest **18** may be made of the same material(s) as the bench seat **11** and/or the table unit **12**, or it may be made of a different material. Also, the backrest **18** may be the same color as the bench seat **11** and/or the table unit **12**, or it may be a different color. For instance, in some embodiments, the bench seat **11** and the table unit **12** may be a first school color and the removable backrest **18** may be a second (and different) school color. The backrest **18** may also have a plurality of apertures, e.g. perforations, which may provide airflow and prevent the backrest from becoming overly hot.

[0050] In some embodiments, the rear side **62** of the backrest **18** may comprise a backpack hook **21**. In some embodiments, the backpack hook **21** may extend away from the rear side **62** of the backrest **18** in a conventional manner. In other embodiments, the backpack hook **21** may extend away from the rear **62** of the backrest **18** and then loop back inward toward the backrest **18**, such that the free end of the hook is shielded by the body of the hook. Accordingly, to hang a backpack in such an embodiment, a user would slide the hanger strap of the backpack up between the free and of the hook **21** and the rear surface of the backrest **18** and then move the hanger strap away from the rear surface of the backrest and onto the hook.

[0051] In some embodiments, the classroom desk **10** may comprise any of a variety of additional storage elements. For example, the classroom desk **10** may comprise a removable book and/or supplies (e.g. writing instruments, art supplies, water bottles, hand sanitizer, etc.) storage compartment that is attachable to the underside of the bench seat **11** or to the underside of the table unit **12**. Or the classroom desk **10** may comprise a book and/or supplies storage compartment on the rear of the backrest **62**, e.g. next to the backpack hook **21**. Or the classroom desk **10** may comprise a removable book and/or supplies storage compartment that is attachable to the side **54** or

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the front 52 of the table unit 12, e.g. by using the same apertures 55, 56 by which the side or front
of the table unit may be secured to a table unit of another classroom desk, as described herein. Or
the classroom desk 10 may comprise a removable book and/or supplies storage compartment that is
attachable to the side 44 of the bench seat 11, e.g. by using the same apertures 45 by which the side
of the bench seat may be secured to a table unit of another classroom desk, as described herein.
[0052] In some embodiments, the classroom desk 10 may also comprise a removable writing
surface 30. The removable writing surface 30 may be used to provide the table unit 12 with a
smooth surface on which to write. As noted earlier, in some embodiments, the upper surface 13 of
the table unit 12 may comprise a plurality of apertures, e.g. perforations, to allow for drainage.
While beneficial for an outdoor table, and particularly a larger outdoor table such as a picnic table,
such apertures do not provide an ideal surface on which to write, draw, etc. As such, the removable
writing surface 30 is configured to attach to the table unit 12 and to cover at least a portion of the
upper surface 13, thereby providing a smooth surface on which to write, draw, or the like. In some
embodiments, such as in the illustrated embodiment, the removable writing surface 30 may cover
the entirety or substantially the entirety of the upper surface 13 of the table unit 12.
[0053] As illustrated, the removable writing surface 30 may provide a flat and smooth surface that
spans continuously between the first and second sides of the upper surface 13 and between the front
and rear of the upper surface. In other embodiments, however, the removable writing surface 30
may comprise one or more cut-outs, divots, or depressions, which may be useful for placing
writing utensils, a laptop or tablet computer, a water bottle, hand sanitizer, or the like.
[0054] The removable writing surface 30 may be made of any weather-resistant material. In some
embodiments, the removable writing surface 30 may be a sheet metal, such as sheet steel, coated
with a weather-resistance coating, such as PVC. In other embodiments, the removable writing
surface 30 may be made of a plastic material. In some embodiments, the removable writing surface
30 may be provided with a surface finish that renders it useful as a dry-erase board.
[0055] The removable writing surface 30 may be secured to the table unit 12 in any of a variety of
different ways. In some embodiments, the removable writing surface 30 may have side faces that
extend downward and optionally inward from each side of the top surface, and which clip on the
respective side faces 54 of the table unit. For example, the side faces of the removable writing
surface 30 may be flexible and biased inward to a width that is less than the width of the table unit
12. Alternatively, the side faces of the removable writing surface 30 may comprise an inward-
extending portion that extends underneath the bottom edge of the side faces 54 of the table unit. In
some embodiments, the side faces of the removable writing surface 30 may have openings that are
configured to receive fasteners that may be present on the side faces 54 of the table unit, e.g. when
a side shield or another classroom desk is connected in a side-by-side orientation.
[0056] In the illustrated embodiment, the removable writing surface comprises a pair of side faces
31, each of which comprises one or more apertures 32 that are configured to align with the one or
more apertures 55 on the respective side face 54 of the table unit 12. Accordingly, the removable
writing surface 30 may be secured to the table unit 12 by inserting a fastener, e.g. a bolt, screw,
clip, or the like, through the aligned apertures 32, 55. To remove the writing surface 30, one need
simply remove the one or more fasteners.
[0057] In other embodiments, the removable writing surface 30 may alternatively include a front
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face and a rear face that are used to secure the writing surface to the table unit **12**. For instance, the removable writing surface **30** may have front and rear faces clip on the respective front and rear faces **52**, **53** of the table unit **12**, such as in the manner described above. Alternatively, the removable writing surface **30** may comprise front and rear faces, at least one of which comprises one or more apertures that are configured to align with one or more apertures on the front or rear face **52**, **53** of the table unit **12**, e.g. apertures **56**. The removable writing surface **30** may then be secured to the table unit **12** by inserting a fastener, e.g. a bolt, screw, clip, or the like, through the aligned apertures. To remove the writing surface **30**, one need simply remove the one or more

fasteners.

[0058] In some (non-illustrated) embodiments, the removable writing surface **30** may comprise a flange that provides a front face, a rear face, and a pair of side faces **31**. Each of the faces may comprise one or more apertures, thereby providing maximum flexibility in how the removable writing surface **30** may be secured to the table unit **12**.

[0059] Embodiments of the classroom desk **10** may also comprise a front shield **70**, a side shield **80**, or both.

[0060] The front shield **70** may be useful for purposes of social distancing, such as during a pandemic. The front shield **70** may also operate as a front divider when installed between first and second classroom desks **10***a*, **10***b* arranged in a face-to-face orientation. The front shield/divider **70** may extend upward of the table unit **12** of the classroom desk (as shown for example in FIG. **1**) or upward of the tabletop surface **101** formed by the table units **12** of first and second classroom desks **10***a*, **10***b* when the classroom desks are attached in a face-to-face orientation (as shown for example in FIG. **3**). The front shield/divider **70** may be made of a transparent material, such as polycarbonate, polymethyl methacrylate (Plexiglass®), or the like. In some embodiments, the front shield/divider **70** may also be configured to be used in learning and/or artistic activities, e.g. as a dry-erase board.

[0061] The front shield/divider **70** may be secured to the front face **52** of a table unit **12** in any of a variety of manners. For instance, the front shield/divider **70** may have one or more apertures **71** that are configured to receive one or more fasteners. When the shield/divider **70** is attached to the front face **52** of a classroom desk **10**, the one or more apertures **71** in the front shield **70** are aligned with the one or more apertures **56** in the front face **52** of the table unit **12** and then a fastener, e.g. a bolt, a screw, a clip, or the like, is inserted through the aligned apertures, **71**, **56**, thereby securing the front shield to the table unit of the classroom desk.

[0062] The side shield **80** may be useful for purposes of social distancing, such as during a pandemic. The side shield **80** may also operate as a side divider when installed between first and second classroom desks **10***a*, **10***b* arranged in a side-by-side orientation. The side shield/divider **80** may extend upward of the table unit **12** of the classroom desk or upward of the tabletop surface **101** formed by the table units **12** of the first and second classroom desks **10***a*, **10***b* when the classroom desks are attached in a side-by-side orientation (as shown for example in FIG. 4). The side shield/divider **80** may also extend above the bench seat **11** of the classroom desk or the planar seating surface **102** formed by the seats of the first and second classroom desks **10***a*, **10***b* when the classroom desks are attached in a side-by-side orientation (as shown for example in FIG. 4). The side shield/divider **80** may also extend to the side of the backrest **18** of the classroom desk or between the adjacent backrests of the first and second classroom desks **10***a*, **10***b* when the classroom desks are attached in a side-by-side orientation (as shown for example in FIG. 4). The side shield/divider **80** may be made of a transparent material, such as polycarbonate, polymethyl methacrylate (Plexiglass®), or the like. In some embodiments, the side shield/divider 80 may also be configured to be used in learning and/or artistic activities, e.g. as a dry-erase board. [0063] The side shield/divider **80** may be secured to the side of a classroom desk in any of a variety of a variety of manners. For instance, the side shield/divider 80 may have one or more apertures 81 that are configured to receive one or more fasteners. The one or more apertures **81** in the side shield **80** may be configured to align with any one or more of the following: (i) one or more apertures **55** in the side face **54** of the table unit **12**, (ii) one or more apertures **45** in the side face **44** of the bench seat **11**, and/or (iii) one or more apertures **65** in the side face **64** of the backrest **18**. Then a fastener, e.g. a bolt, a screw, a clip, or the like, may be inserted through the aligned apertures, thereby securing the side shield **80** to any one or more of the table unit **12**, the bench seat **11**, and the backrest **18** of the classroom desk. In some embodiments, it may be desirable that the side shield **80** is configured to be secured to the table unit **12** and at least one of the bench seat **11** and the backrest **18.** For maximum stability, however, embodiments of the side shield may be configured to be

secured to the table unit 12 and both the bench seat 11 and the backrest 18.

[0064] As shown in FIG. **3**, embodiments of the present disclosure are directed to a set of modular classroom desks in which a first classroom desk **10***a* and a second classroom desk **10***b* are configured to be releasably attached together in a face-to-face orientation. When attached in a face-to-face orientation, the top surface **13** of the table unit **12** of the first classroom desk **10***a* and the top surface **13** of the table unit **12** of the second classroom desk **10***b* form a planar tabletop surface **101**. As shown in FIG. **3**, this planar tabletop surface **101** can optionally be interrupted by a front shield **70**.

[0065] The first and second classroom desks **10***a*, **10***b* may be secured together in a face-to-face orientation in a variety of manners. In the illustrated embodiment, for example, each table unit **12** comprises a front face **52** having one or more apertures **56** configured to receive one or more fasteners. When placed in a face-to-face relationship, one or more apertures **56** in the front face **52** of the table unit **12** of a first classroom desk **10***a* may be aligned with one or more apertures **56** in the front face **52** of the table unit **12** of a second classroom desk **10***b*. A fastener, e.g. a bolt, a screw, a clip, or the like, may be inserted through the aligned apertures, thereby securing the table unit **12** of the first classroom desk **10***a* and the table unit **12** of the second classroom desk **10***b* together.

[0066] When the front shield/divider **70** is attached between the table units **12** of two classroom desks **10***a*, **10***b*, one or more apertures **71** in the front shield/divider may be aligned with one or more apertures **56** in the front face **52** of the table unit **12** of the first classroom desk and one or more apertures in the front face of the table unit of the second classroom desk. A fastener, e.g. a bolt, a screw, a clip, or the like, may then be inserted through the aligned apertures **71**, **56**, thereby securing the table unit **12** of the first classroom desk **10***a* and the table unit of the second classroom desk **10***b* together, with the front shield/divider **70** sandwiched and secured between the two table units.

[0067] As shown in FIG. 4, embodiments of the present disclosure are directed to a set of modular classroom desks in which a first classroom desk 10a and a second classroom desk 10b are configured to be releasably attached together in a side-by-side orientation. When attached in a side-by-side orientation, the top surface 13 of the table unit 12 of the first classroom desk 10a and the top surface 13 of the table unit 12 of the second classroom desk 10b form a planar tabletop surface 101. As shown in FIG. 100, this planar tabletop surface 101 can optionally be interrupted by a side shield 1000. When attached in a side-by-side orientation, the top surface 1001 of the second classroom desk 1002 or optionally be interrupted by a side shield 1002. As shown in FIG. 1003, this planar seating surface 1003 can optionally be interrupted by a side shield 1005 or the backrest 1006 or the backrest 1007 or the first classroom desk 1008 or the second classroom desk 1008 or planar backrest surface 1009 or planar ba

[0068] The first and second classroom desks **10***a*, **10***b* may be secured together in a side-to-side orientation in a variety of manners. In the illustrated embodiment, for example, each table unit **12** may have a side face **54** with one or more apertures **55** configured to receive one or more fasteners. When attached in a side-by-side orientation, one or more apertures **55** in the side face **54** of the table unit **12** of the first classroom desk **10***a* may be aligned with one or more apertures **55** in the side face **54** of the table unit **12** of the second classroom desk **10***b*. A fastener, e.g. a bolt, a screw, a clip, or the like, may be inserted through the aligned apertures, thereby securing the table unit **12** of the first classroom desk **10***a* and the table unit **12** of the second classroom desk **10***b* together. [0069] Additionally or alternatively, each bench seat **11** may have a side face **44** with one or more apertures **45** configured to receive one or more fasteners. When attached in a side-by-side orientation, one or more apertures **45** in the side face **44** of the bench seat **11** of the first classroom

desk **10***a* may be aligned with one or more apertures **45** in the side face **44** of the bench seat **11** of the second classroom desk **10***b*. A fastener, e.g. a bolt, a screw, a clip, or the like, may be inserted through the aligned apertures, thereby securing the bench seat **11** of the first classroom desk **10***a* and the bench seat **11** of the second classroom desk **10***b* together.

[0070] Additionally or alternatively, each backrest **18** may have a side face **64** with one or more apertures **65** configured to receive one or more fasteners. When attached in a side-by-side orientation, one or more apertures **65** in the side face **64** of the backrest **18** of the first classroom desk **10** may be aligned with one or more apertures **65** in the side face **64** of the backrest **18** of the second classroom desk **10** has a screw, a clip, or the like, may be inserted through the aligned apertures, thereby securing the backrest **18** of the first classroom desk **10** and the backrest **18** of the second classroom desk **10** has together.

[0071] When the side shield/divider **80** is attached between first and second classroom desks **10***a*, **10***b*, one or more apertures **81** in the side divider may be aligned with any combination of (i) one or more apertures **55** in the side face **54** of the table unit **12** of the first classroom desk and one or more apertures in the side face of the table unit of the second classroom desk, (ii) one or more apertures 45 in the side face 44 of the bench seat 11 of the first classroom desk and one or more apertures in the side face of the bench seat of the second classroom desk, (iii) one or more apertures **65** in the side face **64** of the backrest **18** of the first classroom desk and one or more apertures in the side face of the backrest of the second classroom desk. A fastener, e.g. a bolt, a screw, a clip, or the like, may then be inserted through each of the aligned apertures, thereby securing the first classroom desk **10***a* and the second classroom desk **10***b* together with the side divider **80** sandwiched and secured between the two table units **12**, the two bench seat **11**, the two backrest **18**, or any combination thereof. In some embodiments, it may be desirable that the side shield 80 is configured to be secured to the table units 12 and at least one of the bench seats 11 and the backrests **18** of the first and second classroom desks **10***a*, **10***b*. For maximum stability, however, embodiments of the side shield **80** may be configured to be secured to the table units **12** and both the bench seats **11** and the backrests **18** of the first and second classroom desks **10***a*, **10***b*. [0072] As shown in FIG. **5**, embodiments of the present disclosure are directed to a set of modular classroom desks in which a first classroom desk **10***a*, a second classroom desk **10***b*, and third classroom desk **10***c*, and a fourth classroom desk **10***d* are configured to be releasably attached together in a picnic table orientation.

[0073] For example, the first classroom desk **10***a* and the second classroom desk **10***b* may be attached in a side-by-side orientation, in which the bench seat **11** of the first classroom desk **10***a* and the bench seat **11** of the second classroom desk **10***b* form a first planar seating surface **102***a*. Optionally, the backrest **18** of the first classroom desk **10***a* and the backrest **18** of the second classroom desk **10***b* may also form a first planar backrest surface **103***a*. Similarly, the third classroom desk **10***c* and the fourth classroom desk **10***d* may be attached in a side-by-side orientation, in which the bench seat **11** of the third classroom desk **10***c* and the bench seat **11** of the fourth classroom desk **10***d* form a second planar seating surface **102***b*. Optionally, the backrest **18** of the third classroom desk **10***d* may also form a second planar backrest surface **103***b*.

[0074] Moreover, the first classroom desk **10***a* and the third classroom desk **10***c* may be attached in a face-to-face orientation. Similarly, the second classroom desk **10***b* and the fourth classroom desk **10***d* may be attached in a face-to-face orientation. Accordingly, the top surface **13** of the table unit **12** of the first classroom desk **10***a*, the top surface **13** of the table unit **12** of the second classroom desk **10***b*, the top surface **13** of the table unit **12** of the table unit **12** of the fourth classroom desk **10***d* together form a planar tabletop surface **101**.

[0075] As shown in FIG. **5**, the planar tabletop surface **101** may be interrupted by one or more front shields **70** and/or by one or more side shields **80**. For example, in the illustrated embodiment, a first

side shield **80***a* is secured between the table unit **12** of the first classroom desk **10***a* and the table unit **12** of the second classroom desk **10***b* and a second side shield **80***b* is secured between the table unit **12** of the third classroom desk **10***c* and the table unit **12** of the fourth classroom desk **10***d*. Similarly, in the illustrated embodiment, a first front shield **70***a* is secured between the table unit **12** of the first classroom desk **10***a* and the table unit **12** of the third classroom desk **10***b* and the table unit **12** of the second classroom desk **10***b* and the table unit **12** of the fourth classroom desk **10***b*.

[0076] Similarly, the first planar seating surface **102***a* and the second planar seating surface **102***b* may be interrupted by one or more side shields **80**. For example, in the illustrated embodiment, a first side shield **80***a* is secured between the bench seat **11** of the first classroom desk **10***a* and the bench seat **11** of the second classroom desk **10***b* and a second side shield **80***b* is secured between the bench seat **11** of the third classroom desk **10***c* and the bench seat **11** of the fourth classroom desk **10***d*.

[0077] As shown in FIG. **6**, embodiments of the present disclosure are directed to a set of modular classroom desks in which a first classroom desk **10***a*, a second classroom desk **10***b*, a third classroom desk **10***c*, and a fourth classroom desk **10***d* are configured to be releasably attached together to form a picnic table **200**. To form a picnic table **200**, the first classroom desk **10***a*, second classroom desk **10***b*, third classroom desk **10***c*, and fourth classroom desk **10***d* are assembled together as described above with respect to the embodiment shown in FIG. **5**. However, unlike in that embodiment, no front shields **70** or side shields **80** are present. Accordingly, the planar tabletop surface **101** is a substantially continuous picnic table surface and the each of the first and second planar seating surfaces **102***a*, **102***b* are substantially continuous benches. By substantially continuous, it is meant that there may exist small grooves where the individual classroom desks **10***a*, **10***b*, **10***c*, **10***d* connect and/or defined cutouts or apertures such as those described in the following paragraph. Note that the top surfaces **13** of the table units **12** that form the tabletop surface **101** and/or the top surfaces **41** of the bench seats **11** that form the seating surfaces **102***a*, **102***b* may also have perforations or the like, as previously described, which do not affect the meaning of substantially continuous as used herein.

[0078] In some embodiments, the table unit **12** of each of a set of classroom desks **10***a*, **10***b*, **10***c*, **10***d* may be provided with one or more beveled front corners **59**. In this way, when the classroom desks **10***a*, **10***b*, **10***c*, **10***d* are arranged in a picnic table orientation, as shown for example in FIG. **5**, or assembled to form a picnic table **200**, as shown for example in FIG. **6**, the beveled corners of each table unit **12** are aligned at the center of the planar tabletop surface **101** to form an aperture **201** that is configured to receive an outdoor umbrella or other shade-providing structure. [0079] Also, in the embodiment illustrated in FIG. **6**, the backrest **18** has been removed from each of the classroom desks **10***a*, **10***b*, **10***c*, **10***d*. The result is a picnic table **200** having conventional bench seating surfaces **10**2*a*, **10**2*b*. In other embodiments, however, some or all of the backrests **18** may be left in place and one or both of seating surfaces **10**2*a*, **10**2*b* of the picnic table **200** may be provided with substantially continuous backrest surfaces **103***a*, **103***b* as described with respect to FIG. **5**.

[0080] It can be seen that the described embodiments provide unique and novel outdoor classroom desks **10** that have a number of advantages over those in the art. While there is shown and described herein certain specific structures embodying the invention, it will be manifest to those skilled in the art that various modifications and rearrangements of the parts may be made without departing from the spirit and scope of the underlying inventive concept and that the same is not limited to the particular forms herein shown and described except insofar as indicated by the scope of the appended claims.

Claims

- 1. A set of classroom desks configured for outdoor use, each classroom desk comprising: a bench seat; a table unit having a top surface; a first leg, the first leg being coupled to both the bench seat and the table unit and having a portion that rests on a ground surface; a second leg, the second leg being coupled to both the bench seat and the table unit and having a portion that rests on a ground surface; and wherein a first classroom desk and a second classroom desk are configured to be releasably attached together in either: i. a side-by-side orientation, in which the top surface of the first classroom desk and the top surface of the second classroom desk form a planar tabletop surface, and the bench seat of the first classroom desk and the bench seat of the second classroom desk form a planar seating surface; or ii. a face-to-face orientation, in which the top surface of the first classroom desk and the top surface of the second classroom desk form a planar tabletop surface.
- **2**. The set of classroom desks of claim 1, further comprising a third classroom desk and a fourth classroom desk, and wherein the first, second, third, and fourth classroom desks are configured to be attached together to form a picnic table.
- **3.** The set of classroom desks of claim 2, wherein to form the picnic table: the first desk and the second desk are attached in a side-by-side orientation, in which the bench seat of the first classroom desk and the bench seat of the second classroom desk form a first planar seating surface; the third desk and the fourth desk are attached in a side-by-side orientation, in which the bench seat of the third classroom desk and the bench seat of the fourth classroom desk form a second planar seating surface; the first desk and the third desk are attached in a face-to-face orientation; and the second desk and the fourth desk are attached in a face-to-face orientation; wherein the top surface of the first classroom desk, the top surface of the second classroom desk, the top surface of the third classroom desk, and the top surface of the fourth classroom desk together form a planar tabletop surface.
- **4.** The set of classroom desks of claim 1, wherein each table unit comprises a front face having one or more apertures configured to receive one or more fasteners; and wherein at least one of the one or more apertures in the front face of the table unit of the first classroom desk aligns with at least one of the one or more apertures in the front face of the table unit of the second classroom desk, and the aligned apertures receive a fastener to secure the table unit of the first classroom desk and the table unit of the second classroom desk together when the first classroom desk and the second classroom desk are attached in a face-to-face orientation.
- **5.** The set of classroom desks of claim 1, further comprising a front divider that is installable between the table unit of the first classroom desk and the table unit of the second classroom desk when the first and second classroom desks are attached in a face-to-face orientation, and which extends upward of the planar tabletop surface.
- **6**. The set of classroom desks of claim 5, wherein the front divider is transparent.
- 7. The set of classroom desks of claim 5, wherein each table unit comprises a front face having one or more apertures configured to receive one or more fasteners; wherein the front divider comprises one or more apertures configured to receive one or more fasteners; and wherein at least one of the one or more apertures in the front divider aligns with at least one of the one or more apertures in the front face of the table unit of the first classroom desk and at least one of the one or more apertures in the front face of the table unit of the second classroom desk, and the aligned apertures receive a fastener to secure the front divider between the table unit of the first classroom desk and the table unit of the second classroom desk.
- **8.** The set of classroom desks of claim 1, wherein each table unit comprises a side face having one or more apertures configured to receive one or more fasteners; and wherein at least one of the one or more apertures in the side face of the table unit of the first classroom desk aligns with at least one of the one or more apertures in the side face of the table unit of the second classroom desk, and the aligned apertures receive a fastener to secure the table unit of the first classroom desk and the

table unit of the second classroom desk together when the first classroom desk and the second classroom desk are attached in a side-by-side orientation.

- **9.** The set of classroom desks of claim 1, wherein each bench seat comprises a side face having one or more apertures configured to receive one or more fasteners; and wherein at least one of the one or more apertures in the side face of the bench seat of the first classroom desk aligns with at least one of the one or more apertures in the side face of the bench seat of the second classroom desk, and the aligned apertures receive a fastener to secure the bench seat of the first classroom desk and the bench seat of the second classroom desk together when the first classroom desk and the second classroom desk are attached in a side-by-side orientation.
- **10.** The set of classroom desks of claim 1, further comprising a side divider that is installable between the first classroom desk and the second classroom desk when the first and second classroom desks are attached in a side-by-side orientation, and which extends upward of the planar tabletop surface.
- **11**. The set of classroom desks of claim 10, wherein the side divider is transparent.
- 12. The set of classroom desks of claim 10, wherein each table unit comprises a side face having one or more apertures configured to receive one or more fasteners; wherein the side divider comprises one or more apertures configured to receive one or more fasteners; and wherein at least one of the one or more apertures in the side divider aligns with at least one of the one or more apertures in the side face of the table unit of the first classroom desk and at least one of the one or more apertures in the side face of the table unit of the second classroom desk, and the aligned apertures receive a fastener to secure the side divider between the table unit of the first classroom desk and the table unit of the second classroom desk.
- **13**. The set of classroom desks of claim 10, wherein each bench seat comprises a side face having one or more apertures configured to receive one or more fasteners; wherein the side divider comprises one or more apertures configured to receive one or more fasteners; and wherein at least one of the one or more apertures in the side divider aligns with at least one of the one or more apertures in the side face of the bench seat of the first classroom desk and at least one of the one or more apertures in the side face of the bench seat of the second classroom desk, and the aligned apertures receive a fastener to secure the side divider between the bench seat of the first classroom desk and the bench seat of the second classroom desk.
- **14.** The set of classroom desks of claim 10, wherein each table unit comprises a side face having one or more apertures configured to receive one or more fasteners; wherein each bench seat comprises a side face having one or more apertures configured to receive one or more fasteners; wherein the side divider comprises one or more apertures configured to receive one or more fasteners; wherein at least one of the one or more apertures in the side divider aligns with at least one of the one or more apertures in the side face of the table unit of the first classroom desk and at least one of the one or more apertures in the side face of the table unit of the second classroom desk, and the aligned apertures receive a fastener to secure the side divider between the table unit of the one or more apertures in the side divider aligns with at least one of the one or more apertures in the side divider aligns with at least one of the one or more apertures in the side face of the bench seat of the first classroom desk, and the aligned apertures receive a fastener to secure the side divider between the bench seat of the first classroom desk and the bench seat of the second classroom desk and the bench seat of the second classroom desk and the bench seat of the second classroom desk and the bench seat of the second classroom desk.
- **15**. The set of classroom desks of claim 1, in which one or more of the classroom desks further comprises a removable writing surface, wherein the removable writing surface is configured to be releasably attached to the top surface of the table unit.
- **16.** The set of classroom desks of claim 15, in which the top surface of the table unit has one or more apertures, and the removable writing surface has a smooth upper surface.
- 17. The set of classroom desks of claim 15, wherein the writing surface comprises an upper

surface, a first side face extending downward from the upper surface, and a second side face extending downward from the upper surface; wherein each of the first side face and the second side face comprises one or more connection elements by which the writing surface is securable to the table unit.

- **18**. The set of classroom desks of claim 17, wherein the one or more connection elements comprise an aperture configured to align with an aperture in the table unit and receive a fastener.
- **19**. The set of classroom desks of claim 1, in which one or more of the classroom desks further comprises a removable backrest.
- **20**. The set of classroom desks of claim 1, in which one or more of the classroom desks has a side opposite the bench seat that is configured to accept a wheelchair.