TECHNOLOGY IN A CLASSROOM

(*Click on link to navigate*)

Typically, a classroom is a learning space that seats about 25 students. The technology in a classroom consists of:

- **CLASSROOM PC** to research, create, interact with and playback images, video, audio and data.
- **LCD PROJECTOR** to projector the image from the **Classroom PC, DVD/VHS Player, laptop or other mobile device**.
- **KVM SWITCH BOX** to connect a **laptop or other mobile device** to the **LCD Projector**.
- **DVD/VHS PLAYER** to playback videos on DVD and VHS formats.
- **SPEAKER** to project sound and control the volume from the **Classroom PC** and **DVD/VHS Player**.

Some classrooms may have additional equipment (*not illustrated above*) such as:

- **DOCUMENT CAMERA** to project transparencies and images of solid objects through the **LCD Projector**.
- **SMART SYMPODIUM** to digitally annotate lecture notes and PowerPoint presentations on the **Classroom PC**.
- **FLEX FURNITURE** that allows for easy desk re-configuration and promotes social and collaborative learning.

For technical assistance or to schedule one-on-one training for these and other classroom technologies, please contact IT /Media Services.

Warwick (**Knight**) Campus: **825-2231**	Lincoln (**Flanagan**) Campus: **333-7081**
Providence (**Liston**) Campus: **455-6111**	**Newport** County Campus: **851-1708**

To reserve equipment, **click here** to submit an online form or call 455-6111.

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ABOUT THE CLASSROOM PC

The **Classroom PC** can be used to present images, presentations, data and videos in the classroom, in conjunction with the classroom **LCD Projector** and **Speaker**. Currently, **Windows 8** is the operating system that is being used. For more detailed information about the **Windows 8** operating system, **click here.**

Instructors who need special software to be installed on a classroom computer or are having problems with hardware or software should notify the Service Desk at 825-1112 or itsd@ccri.edu.

POWER ON and SIGN ON
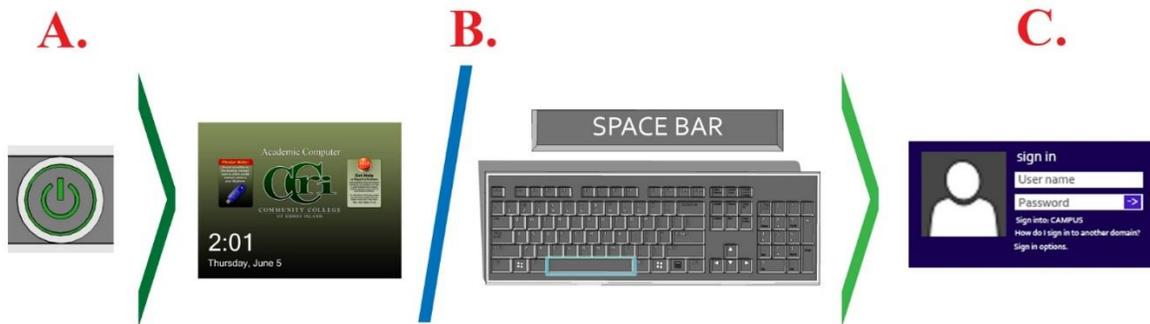
To **power on** the classroom computer:

A. Press the **power** button on the front of the computer.

To **sign on** to the classroom computer:

B. After the computer **powers on**, a **welcome screen** appears. Press the **spacebar** to advance to the **sign on** screen.
C. Enter your **username** and **password**. Then click **OK**. The **start screen** will appear.

Accessing the DESKTOP

The **start screen** is the Windows 8 version of the traditional start menu, where the computer's software applications can be found. For the user's convenience, many of the software application icons have been placed in folders onto the **Classroom PC**'s **desktop**.
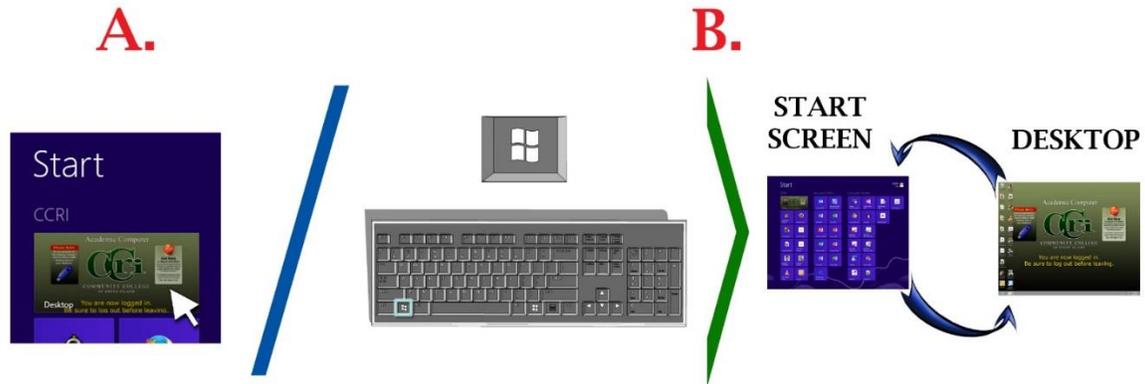
To access the **Classroom PC**'s **desktop**:

A. Click the **desktop** "**tile**" in the upper left corner of the **start screen**.
B. To toggle between the **desktop** and the **start screen**, press the "**windows**" key.

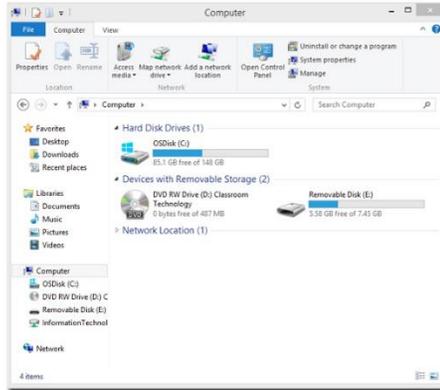## Devices with Removable Storage

First:

- To access media and data files on a **DVD** or a **CD**, insert (1.A) the **DVD** or **CD** into (1.B) the **disc tray**.
- To access media and data files on an **USB flash drive**, insert (2.A) the **USB flash drive** into the (2.B) **USB Port**.

A. **B.**

Second:

A. Click on the **file explorer** icon on the **desktop**'s **task bar**. The **file explorer** window will appear.
B. In the side menu click on **computer**. The window's appearance will change. Under the "**devices with movable storage**" section, an icon for the inserted item will appear.
   1. **To open a data file:** Double click on the item to open and access the files.
   2. **To play a video**: right click on the **DVD** or the **video file on the USB Flash Drive**. A menu will appear and you then select **Play with VLC Media Player**.

SIGN OUT

When finished using the classroom computer, you must either **sign out** or **shut down** the **Classroom PC**.
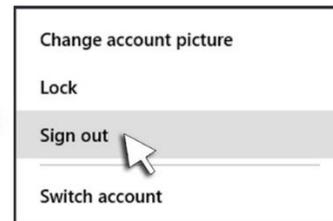

A. **B.** **C.**
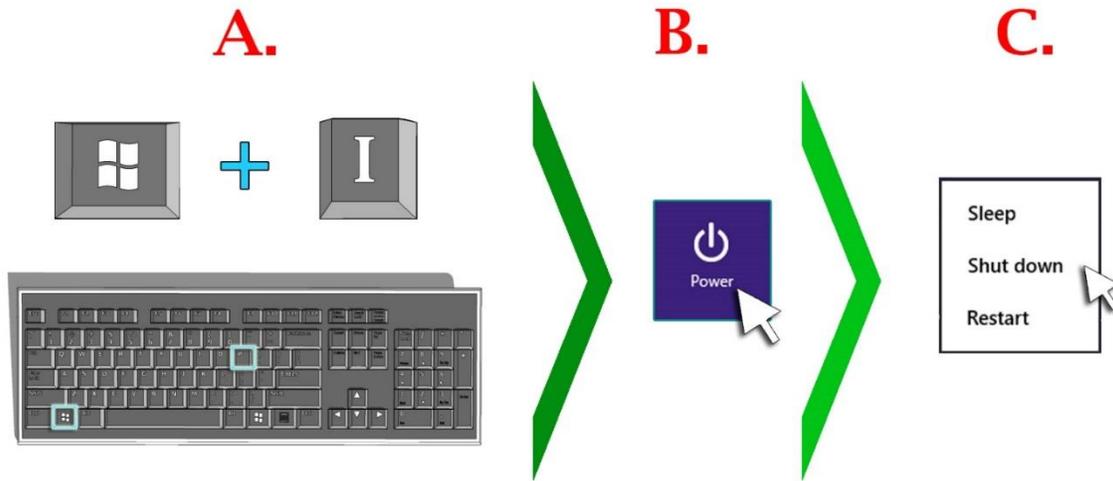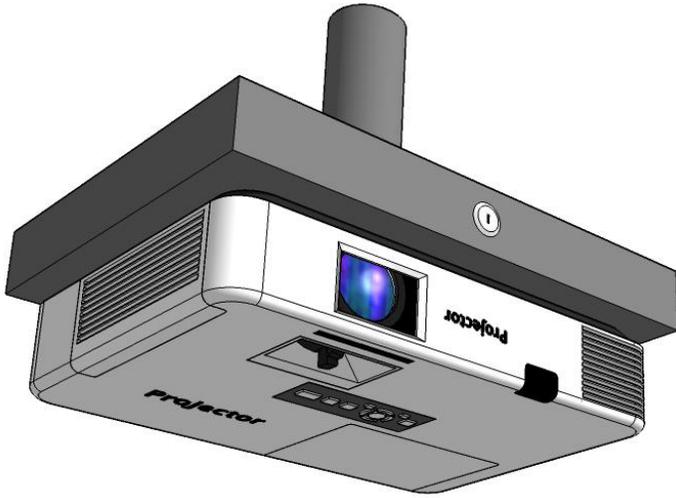
To **sign out** of the **Classroom PC**:

A. Press the "**windows**" key to enter the **start screen**.
B. In the **upper right corner** of the **start screen**, click on your **username**. A menu will appear.
C. Click the **sign out** option.

SHUT DOWN

To **shut down** the **Classroom PC**:

A. Press the "**Windows**" and "**I**" keys to access the **setting's menu**.
B. Click on the **power** icon. A menu will appear.
C. Click the "**shut down**" option.

OPERATING THE LCD PROJECTOR

~ VIA ~

PROJECTOR REMOTE / CCRI PROJECTOR CONTROL

The classroom **LCD Projector** can be used to project videos, images, graphics and data from the **CLASSROOM PC**, a **LAPTOP AND OTHER MOBILE DEVICES**, videos from the classroom **DVD/VHS PLAYER** and images from a **DOCUMENT CAMERA**. It can be operated with the **projector remote** or the **CCRI Projector Control** software application.

PROJECTOR REMOTE
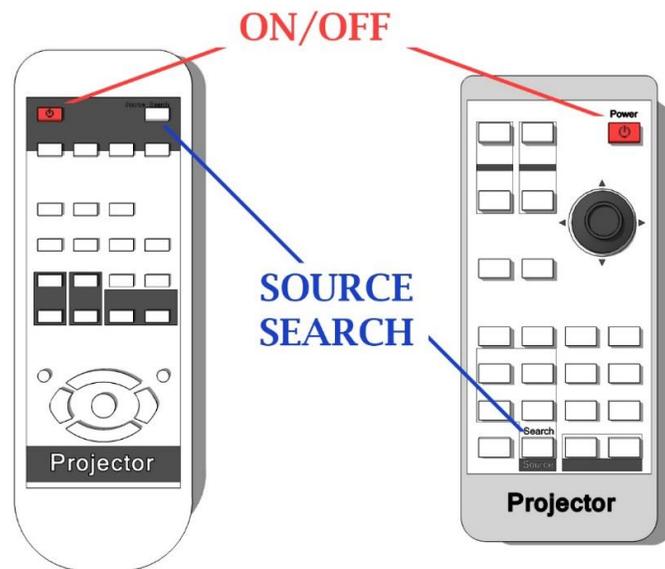
1. To **turn on** the LCD Projector, point the **projector remote** at the LCD Projector and then press the **power** button.
2. To **toggle between** the **CLASSROOM PC** and the **DVD/VHS PLAYER**, point the remote at the projector and press the **source search** button.
3. To project an image from a laptop or other mobile device, with the device connected to the **KVM SWITCH BOX**, set the LCD Projector's source as **CLASSROOM PC** by pressing the source search button.
4. To **turn off** the LCD Projector, press the **power** button twice.

CCRI PROJECTOR CONTROL

To turn on the **LCD Projector** with the **CCRI Projector Control**, power on and sign in to the **CLASSROOM PC**. The CCRI Projector Control will be available once the desktop loads. This option is not available in all classrooms.
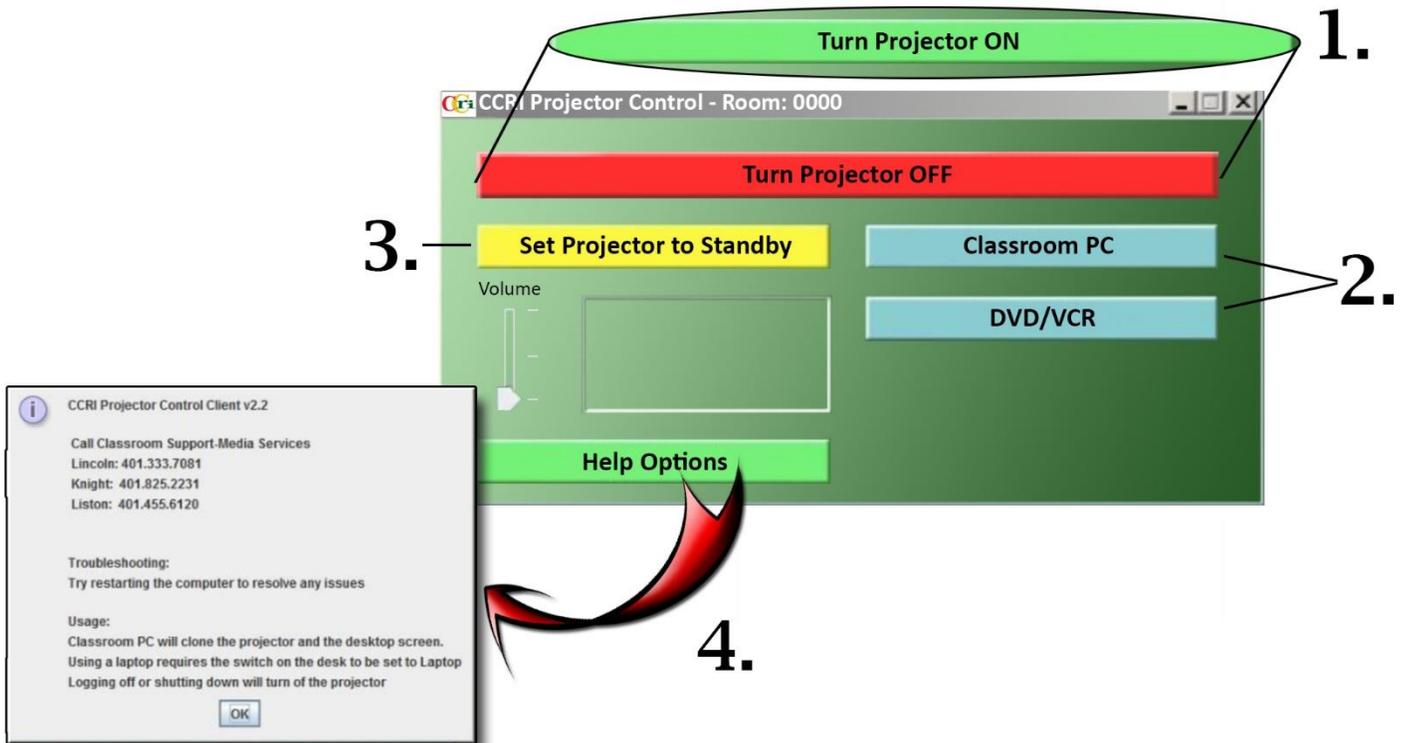
1. To **turn on** the LCD Projector, click on the **turn projector on** button.
2. By default, the **CLASSROOM PC**'s image will be projected when the CCRI Projector Control turns on the LCD Projector.
    a. To toggle between the **CLASSROOM PC** and **DVD/VHS PLAYER**, click on the associated button.
    b. To project an image from a laptop or other mobile device, with the device connected to the **KVM SWITCH BOX**, set the LCD Projector's source as **CLASSROOM PC**.
3. To **mute** the projector's image, click the **set projector to standby** button. Muting the LCD Projector's image will replace the image with a black projection. To un-mute the LCD Projector, click the button again.
4. For more information about the CCRI PROJECTOR CONTROL, click the **help options** button and a window will appear displaying the information.
5. To **turn off** the LCD Projector, click the **turn projector off** button.
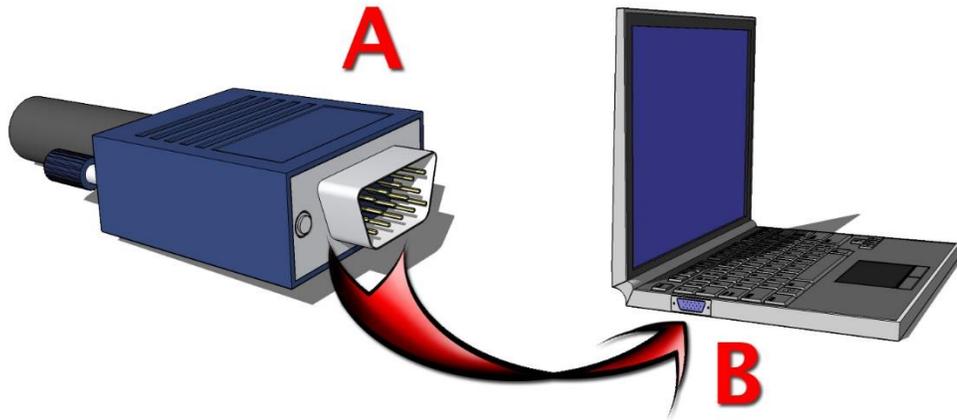
CONNECTING A LAPTOP OR OTHER MOBILE DEVICE
~ VIA ~
KVM SWITCH BOX

By connecting a laptop or other mobile device to the **KVM Switch Box**, images, graphics, video and data from that device can be displayed through the **LCD PROJECTOR**.

1. Turn on the laptop or other mobile device.

2. **Connect** (**A**) the **VGA cable** (located on the side of the desk) to (**B**) the laptop or other mobile **device's display port**. ** <u>Note</u>: *Not all devices use a VGA as a display port connection. A VGA adaptor may be required. Consult the device's user manual and/or contact IT Media Services for assistance*. **


3. Press the **Laptop 2** button on the **KVM Switch Box.** The image from the laptop or other device will be projected through the classroom's **LCD PROJECTOR**.
4. When finished, press the **Desktop 1** button to project the **CLASSROOM PC**.
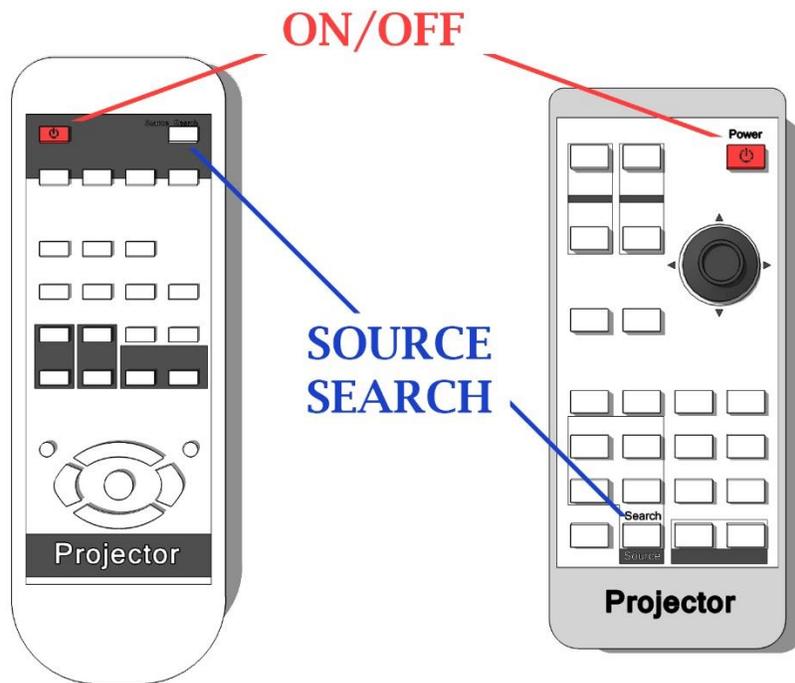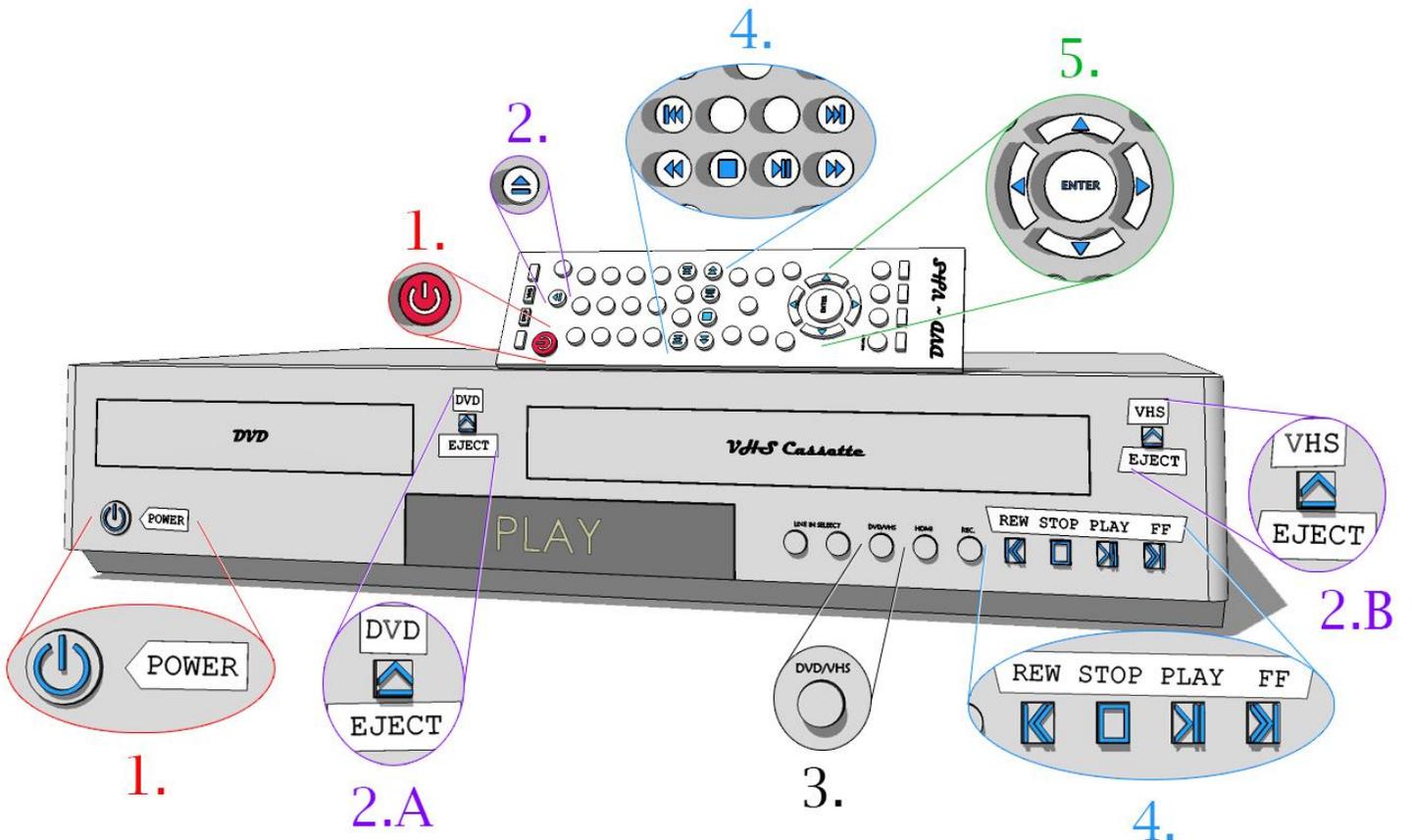
5. Press the **source search** button on the **projector remote** to **toggle between** the **CLASSROOM PC** and **DVD/VHS PLAYER**.

OPERATING THE DVD/VHS PLAYER

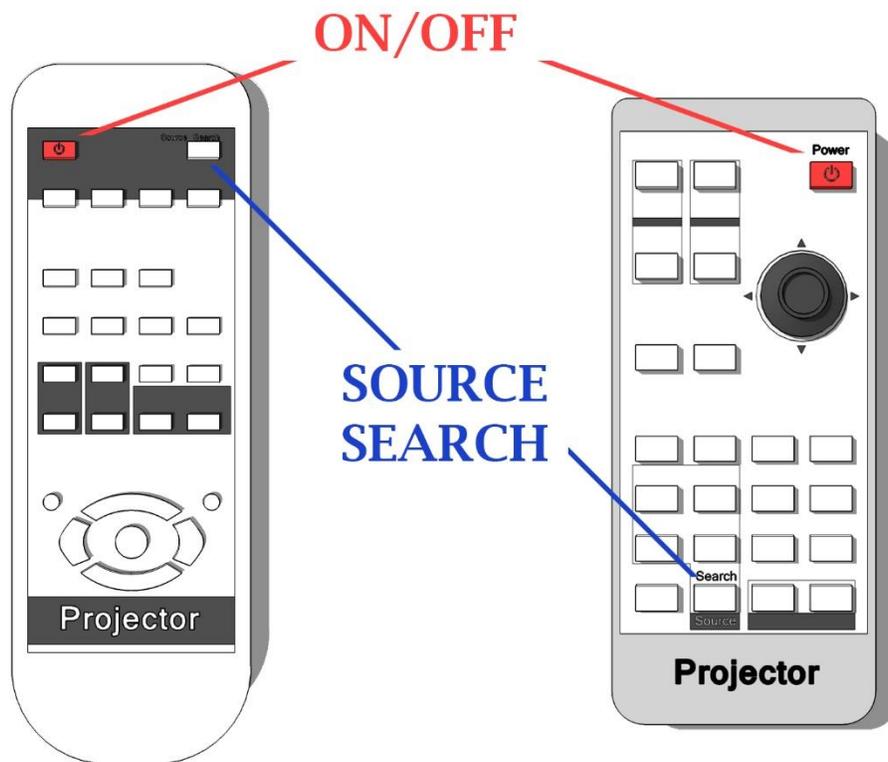REMOTE

DVD PLAYER
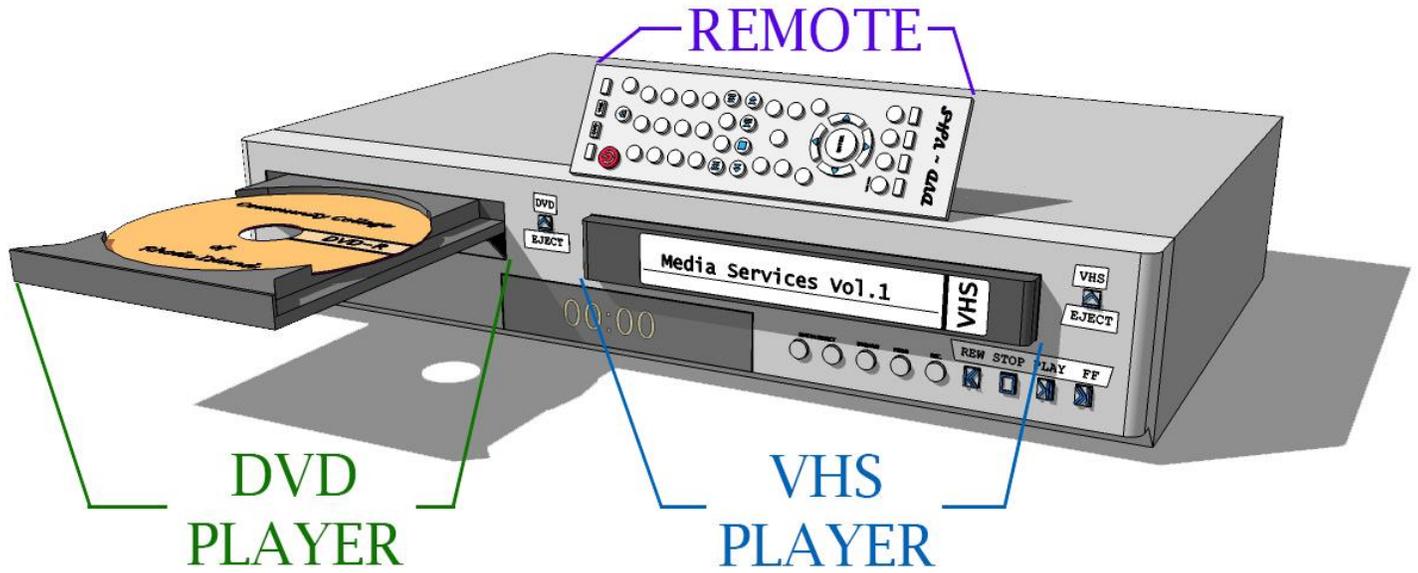
VHS PLAYER

The **DVD/VHS Player** can be used to play videos from **VHS Cassette Tapes** and **DVDs** that are displayed through the **LCD PROJECTOR** onto the screen.

1.

2.

2.A

2.B

3.

4.

5.

1. Press the **power** button to the DVD/VHS Player to **turn the unit on or off**.
2. Press the **eject** button to **eject** the media from the device.
    a. Press the **DVD eject** button to **open/close the DVD tray**.
    b. Press the **VHS eject** button to eject the **VHS cassette tape**.
3. Press the **DVD/VHS** button to **toggle** between the **DVD** and **VHS** players.
4. To control the media, press the **play** button to **play/pause** playback, **rewind** to **reverse** playback, **fast forward** to quickly **advance** and **stop** to **end** the last action.
5. To interact with a DVD menu, using the remote, use the **arrow** buttons to **browse** and the **enter** button to **select.**

The **DVD/VHS Player** does not have its own **VOLUME CONTROL**. The volume can be raised and lower directly from the classroom **SPEAKER**.
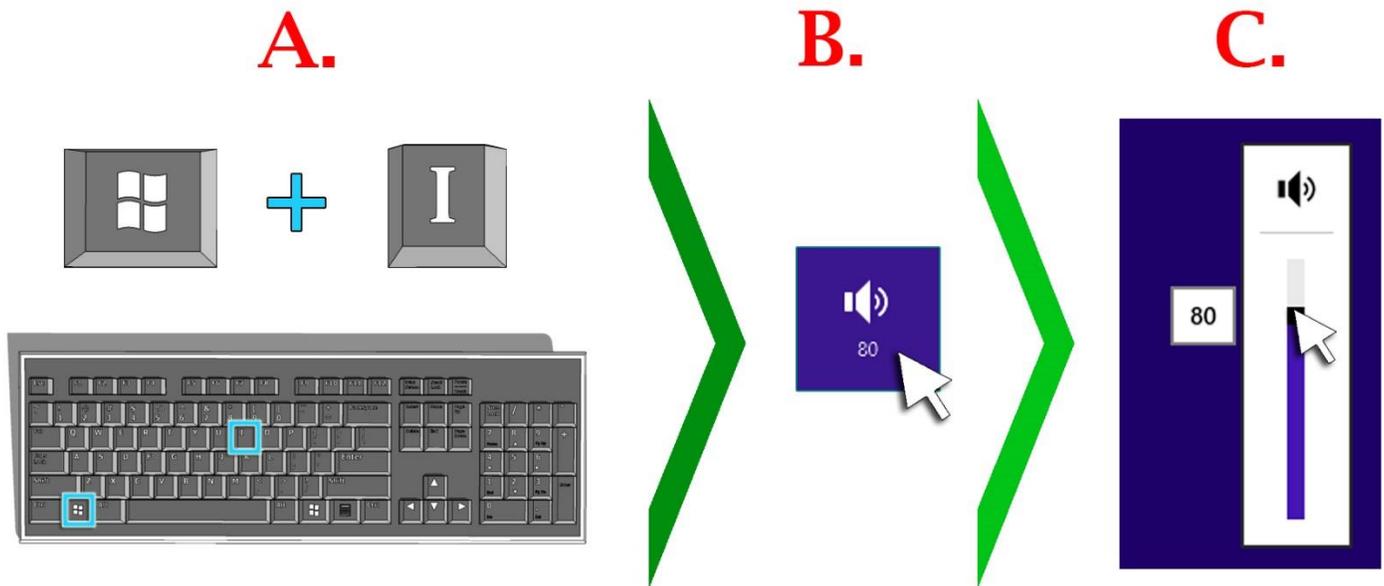

Press the **source search** button on the **projector remote** to **toggle** between the **CLASSROOM PC** and **DVD/VHS PLAYER**.

VOLUME CONTROL AND SPEAKER

The **speaker** can be used to project the audio from the **CLASSROOM PC** and **DVD/VHS PLAYER** and control the overall volume.

CLASSROOM PC – Volume Control

When playing audio from the **CLASSROOM PC**:

1. The **CLASSROOM PC**'s **master volume** controls the PC's output volume that goes into the speaker.
   a. Press the **Windows** and **I** keys to access the **setting's menu**.
   b. Click on the **speaker icon**.
      i. If there is an **"X"** over the **speaker icon**, the volume is **muted**.
   c. Click and drag the **volume fader**. Drag the **fader up to raise** the volume; drag the **fader down to lower** the volume.
2. Adjust the volume on the **speaker**.

DVD/VHS PLAYER – Volume Control

The **DVD/VHS PLAYER** does not have its own volume control. The volume can be raised and lowered directly from the **speaker**.

Speaker - Overall Volume Control

1. To **turn on** the speaker, flip the **On/Off switch** on the back of the speaker. A red light on the front of the speaker will light up to indicate that the speaker is on.
2. The speaker's **volume knob** is the top knob on the front of the speaker.
    a. Turn the knob **clockwise to raise** the volume.
    b. Turn the knob **counterclockwise to lower** the volume.
3. For a more enjoyable listening experience, make sure that the front of the speaker is facing the class.

Operating the Document Camera

** NOTE: *Not all classrooms are outfitted with a Document Camera.* **
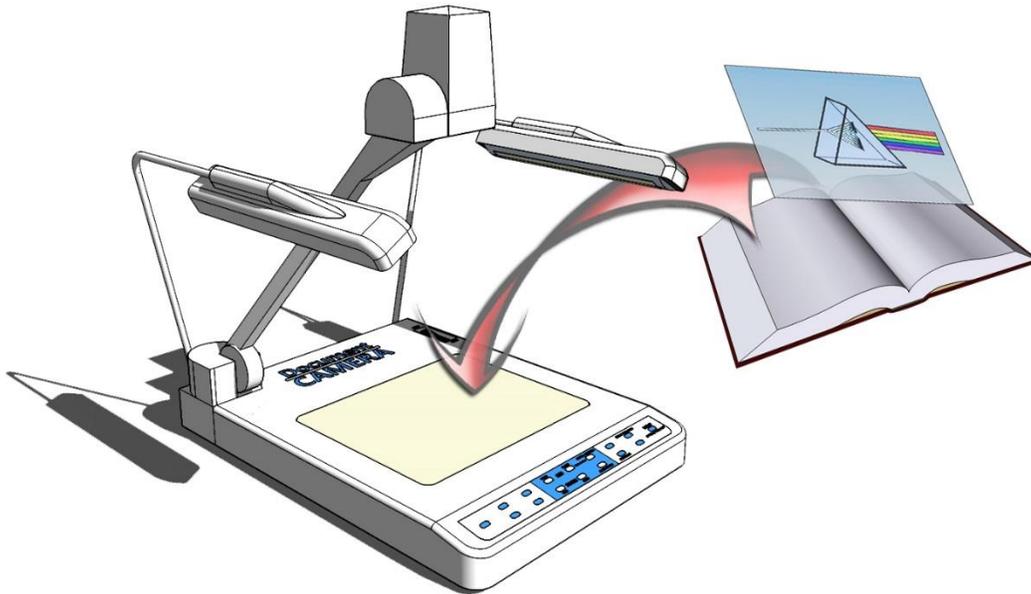
A **Document Camera** is similar to an old-fashioned overhead projector in that it can be used to display acetate transparencies. However, unlike an overhead projector, a **Document Camera** can be used to display a video image of transparent and solid objects through the **LCD PROJECTOR**.
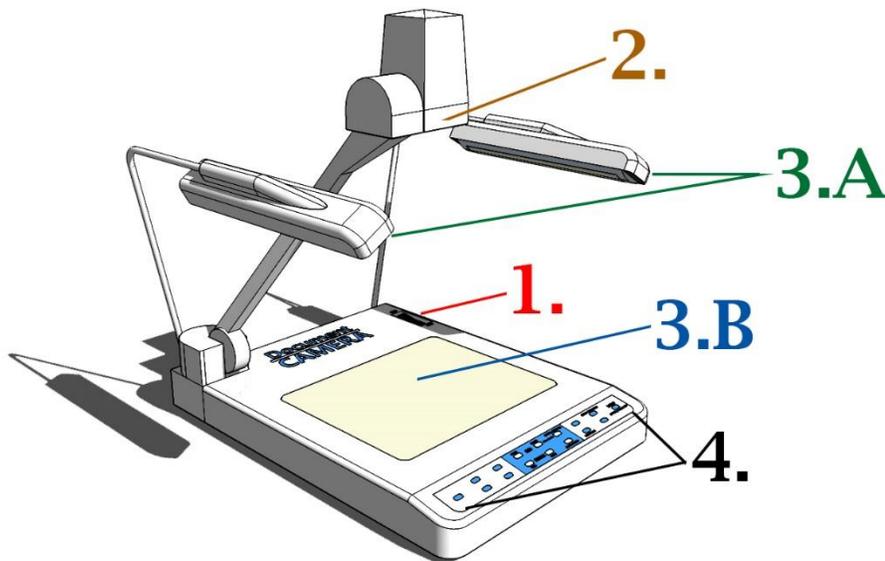
1. Press the **power** button to **turn on/off** the Document Camera.
2. Place **objects underneath** Document Camera's **camera** to broadcast the video image through the **LCD PROJECTOR**.
3. The needed light source will differ between objects.
   a. To display **solid objects** (i.e.: a book), turn on the **upper lamps**.
   b. To display **transparent objects** (i.e.: an acetate transparency), turn on the **base lamp**.
4. Use the buttons on the **control panel to operate** the Document Camera.
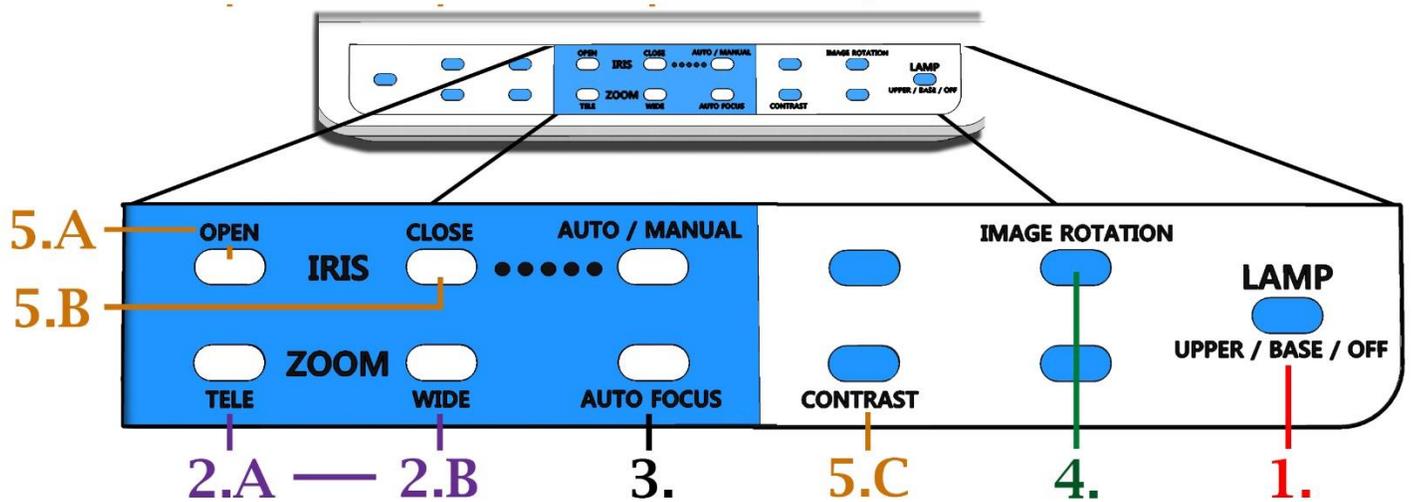
1. The needed light source will differ between objects.
    a. To display **solid objects** (i.e.: a book), press the **lamp** button **once** (1x) turn on the **upper lamps**.
    b. To display **transparent objects** (i.e.: an acetate transparency), press the **lamp** button **twice** (2x) turn on the **base lamp**.
    c. To **turn off** the **lamps**, press the **lamp** button **three times** (3x).
2. To **zoom in/out** of the object:
    a. Press **tele** to **zoom in**.
    b. Press **wide** to **zoom out**.
3. To put the object in **focus**, press the **auto focus** button.
4. Press **image rotation** to **rotate the video image** of the object in 90 degrees increments.
5. To adjust how the camera manages the light…
    a. Press **open** to open the **iris** to **brighten** the video image.
    b. Press **close** to close the **iris** to **darken** the video image.
    c. Press **contrast** to **adjust the difference between light and dark** within the video image.

To have the **Document Camera** display its video image through the LCD Projector; *if the unit is permanently installed in a classroom:*

1. Press the **DOC-CAM 3** button on the **KVM SWITCH BOX**.
    a. To toggle between the document camera and a computer source, press the associated button.

ON/OFF
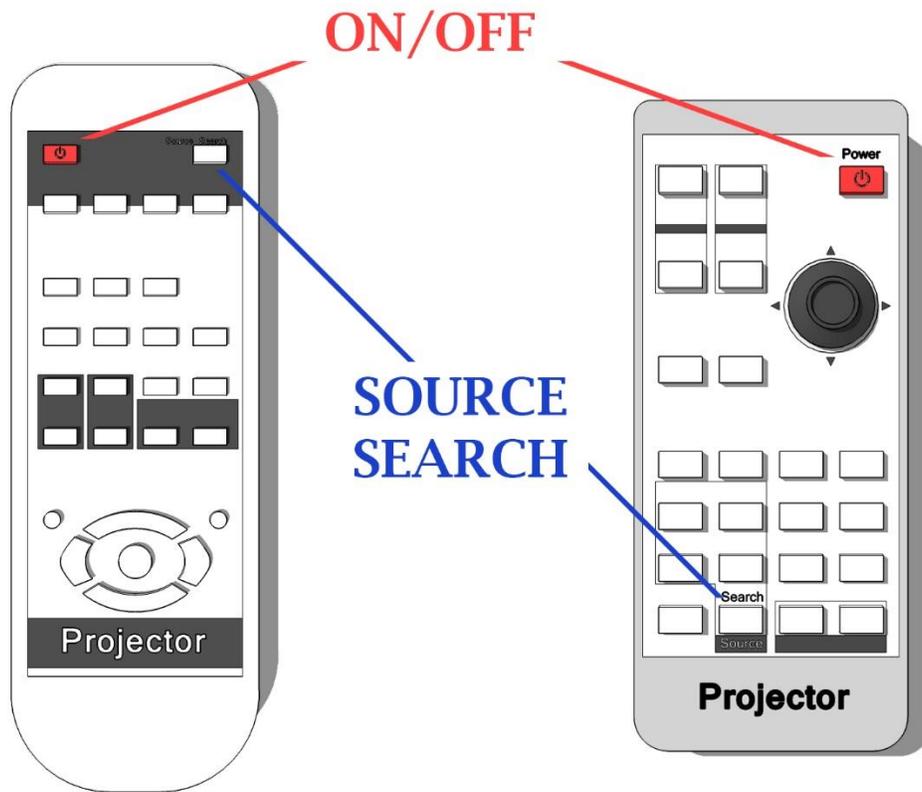
SOURCE
SEARCH

2. Press the **source search** button on the **projector remote** to toggle between the **CLASSROOM PC** and **DVD/VHS PLAYER** sources.

ABOUT THE SMART SYMPODIUM

Writing tablets, such as the **SMART Sympodium**, allow presenters to annotate any desktop application in digital ink to make a point, reinforce content and engage students. Along with **SMART Ink** (*add-on*), PowerPoint slides can be annotated, web content can be highlighted and videos, images and data can be labeled and **SMART Notebook** (*software*), lecture notes can be written, saved and distributed.

It is well suited for the **CLASSROOM** and **LECTURE HALL** where viewing whiteboard content may be difficult and is an asset in **lecture capture** and **distance learning** applications where the presenter (instructor) is not physically present before the viewer (student).

The **SMART Sympodium** takes the place of the **CLASSROOM PC**'s monitor.
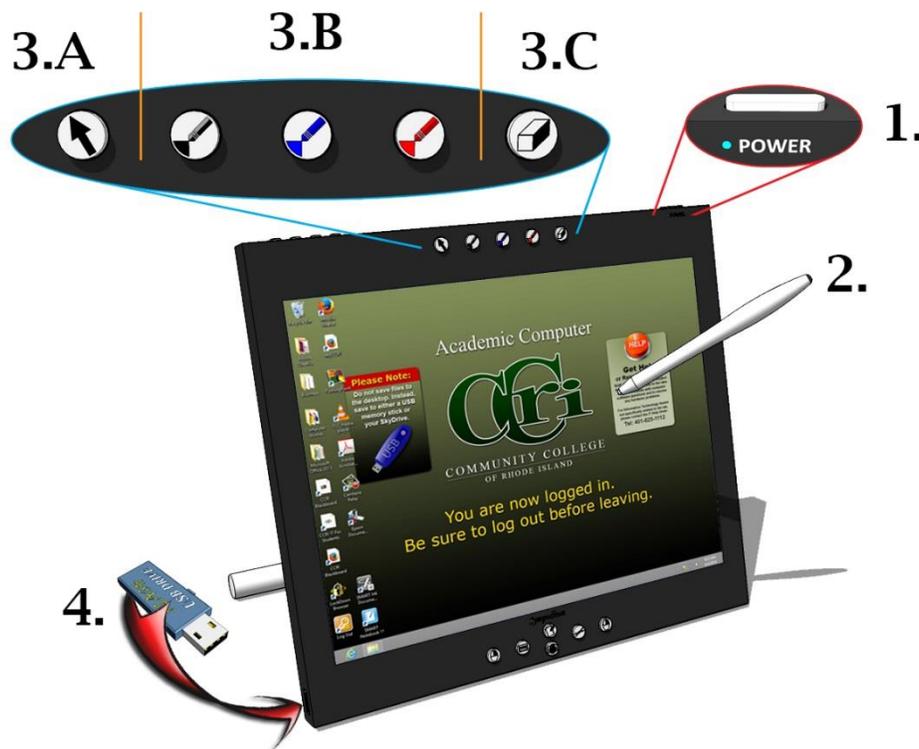
1. Press the **power** button, to **power on/off** the **Sympodium**.
2. Use the **stylus pen** to interact with the **CLASSROOM PC** or to annotate in digital ink.
3. The buttons at the top of the **Sympodium** control the **stylus pen**'s functions:
    a. Press the **arrow** (**select**) button to use the **stylus pen** as a mouse.
        i. Tap the screen with the **stylus pen** to click.
        ii. Hold the icon/selection and glide the **stylus pen** and the release to drag and drop.
    b. Press the **black**, **blue** or **red pen** buttons to write and draw in digital ink in the associate color.
        i. Glide the **stylus pen** over the screen to write and draw.
    c. Press the **eraser** button to use the **stylus pen** to erase the digital annotations.
        i. Glide the **stylus pen** over the annotations to erase.
4. On either side of the Sympodium is a **USB port** to insert a **USB flash drive**.

ABOUT THE FLEX (MOBILE) DESKS

Mobile student desks, such as the Flex Desk, can quickly and easily enable the transition from the lecture to group activities, creating a community in the learning environment. The furniture in the classroom can be as beneficial to the learning process as the available technology.
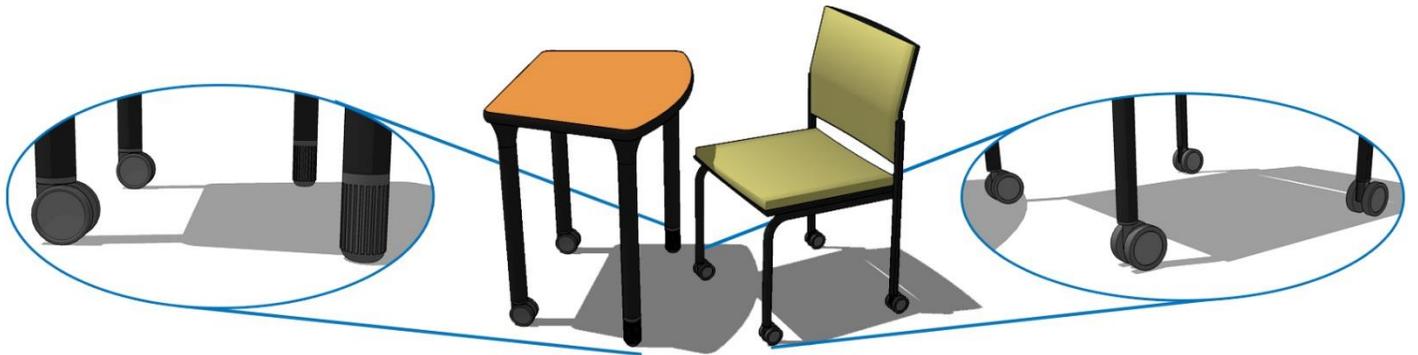
Both the desk and chair have wheels for easy reconfiguration, unlike a regular student desk where can be difficult to move because it is bulky and the desk legs interlock with the neighboring desks when the desks pushed tightly together.
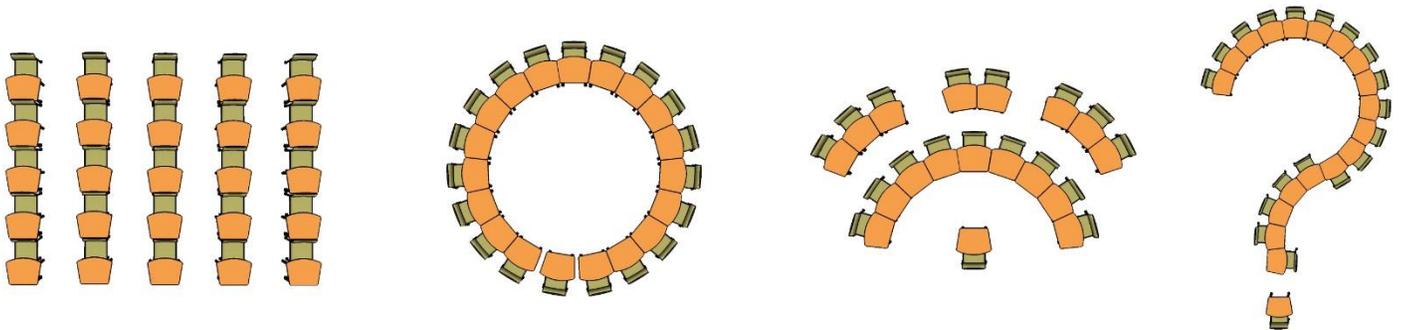
Large group configurations can neatly and quickly be arranged; transitioning from uniform rows, to a large group circle, a conference style semi-circle, or whatever the configuration that best suits the activity.

Unlike a regular student desk where the table top and seat are connected, the table and chair are separate, providing more flexibility and options when implementing group activities.

Small groups benefit as well. When regular student desks are arranged to accommodate small groups, a conference table style hierarchy begins to emerge; distancing the individual at the "head of the table" from their peers at the opposite end.

The curved shape of the mobile desks create a circular shape when brought together, allowing the participants to be "equals at the table", encouraging social collaboration and letting the group leader(s) naturally emerge.