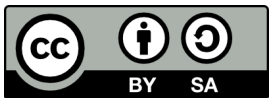
A pottery instructor's guide to teaching

This document is primarily intended for pottery teachers, but may also be helpful to other craft teachers. It's meant to help folks who want to get into teaching a skill and expertise that is deeply embedded in the body.

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Student Outcomes

When teaching a craft it can be helpful to build your program with specific goals for your students in mind. In the academic realm, these goals are often called student outcomes.

Student outcomes can help you shape your curriculum and organize for your lessons.

Below we've outlined three major areas of student development (technical competency, empowerment and independence, and belonging) alongside some generic student goals under those areas that you can adjust for your own purposes.

- Technical competency:
    - Students will know how to perform specific skills (for example, centering, opening and pulling clay on the wheel or basic hand building techniques like scoring, slipping and smoothening)
- Empowerment and independence:
    - Students will feel confident to practice this craft on their own
    - Students will empowered to try new things and make mistakes
- Belonging
    - Students self expression is welcomed and encouraged
    - Students' lived experiences are recognized, respected and embraced
    - Students feel encouraged to learn from their peers and champion each other's creativity

Course and lesson structure

Lesson structure

There are some very general things that can help you anchor your crafting lessons.

1. Demonstration:
    a. Teacher showcases a new skill to the students
2. Independent practice time
    a. Students work on their own to try out that skill with assistance of the teacher
    b. Students
3. The instructor will do any special demonstrations based on demand (optional)
    a. If students have personal projects, the instructor can do a demonstration

Semester-long structure

Skills should build on one another and help students be able to finish a ceramic project from start to finish by the end of the semester.

Teaching methods

How to encourage student development in the following areas:

- Technical competency:
    - **Do demonstrations:** demos are a great way for students to watch and learn a new skill. It can help for teachers to *foreshadow* each demo at the top, i.e. teachers should give students a clear understanding of what they are about to watch before they watch the demonstration.
        - Three step demonstrations: It can be helpful for teachers to split up demonstrations into three parts, loosely structured as *I do*, *you do*, and *you do, I assist*
            - *I do:* The teacher does the demonstration and all students watch *without* participating.
            - *You do*: The teacher does each step simultaneously with the students.
            - *You do, I assist:* Students try on their own as the teacher occasionally assists them individually.
        - **Give one-on-one attention:** once students are practicing a skill on their own, the teacher should rotate between students and help them with any particular skills they may struggle

    - **Open Studio:** students are encouraged to practice their class skills by attending open studio sessions offered throughout the week.
    - **Help students do at-home learning**:
        - **Resources:** Students should have access to videos, graphics, diagrams and other online materials
- Empowerment and independence:
    - **Provide independent practice time during class:** students practice the skills they learned from the teacher and refine them with intermittent hands-on and verbal guidance from teacher
    - **Encourage a trial-and-error mindset:** teachers should encourage students to experiment and lean into the process, rather than get too bogged down with finishing a final product,
    - **Foster peer collaboration:** Encourage students to learn from one another.
- Belonging
    - **Practice and model active listening**: When bringing students together at first, introduce yourself, your pronouns, and why you love this craft. Honesty and vulnerability can help others open up. Throughout the class, you may also check in with students and to learn what's going on in each others' lives. It can also help to recall and then reflect what students have expressed previously, to signal how the teacher is incorporating feedback into their lesson.
    - **Celebrate and encourage students to pursue their journey**: Celebrate student wins and milestones on all levels, whether they are building complex projects or are mastering an individual skill. Encourage student self expression, whether they are exploring identity and cultural heritage or whether they are pursuing functional or artistic projects. Encourage students to pursue their individual interests.

Introduction to wheel throwing (5-8 weeks)

Course description

In this course, beginners will learn fundamental skills on the pottery wheel to create basic forms like cylinders, cups, and bowls. Through demonstrations and hands-on instruction, students will learn how to wedge, center, and pull clay, along with trimming and glazing their finished pieces. This class is designed for people who are new to the craft, though more experienced students are also welcome.

Learning outcomes

- Technical competency:
    - Students will know how to wedge, center, open, and pull clay on the wheel.
    - Students will also know how to trim and glaze pieces.
    - Students will know basic handbuilding techniques like scoring, slipping and smoothing.
- Empowerment and independence:
    - Students will feel confident to practice pottery on their own
    - Students will feel empowered to try new things and make mistakes
- Belonging
    - Students self expression is welcomed and encouraged
    - Students' lived experiences are recognized, respected and embraced
    - Students feel encouraged to learn from their peers and champion each other's creativity

Lesson structure

1. Demonstration:
    a. Teacher showcases a new skill to the students
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3. The instructor will do any special demonstrations based on demand (optional)
    a. If students have personal projects, the instructor can do a demonstration

Week-by-week overview

Week 1

The first week class is extremely important for students. In this introductory class students will learn about one another, set intentions for the duration of the course with the instructor, receive an overview of the overall course, learn about studio procedures (including storage, community tools, firing, cleaning and other studio etiquette) and get an introduction to one of the core skills.

This is the schedule for the first class:

Duration	Topic	What is covered
20 mins	**Introductions / course overview**	● Students speak a little bit about themselves ● Students share about their experience with clay ● Students set intentions and goals for the duration of the course ● Instructor gives an overview of how firing works the 6 or 8 weeks of the course (what will be covered)
10 mins	**How the studio works**	Studio etiquette ● Where to find things in the studio ● How storage works ● How firing works ● Where to find tools and clay ● How to handle their clay (how reclaim works, where to keep clay)
30 mins	**Skill demo & teaching**	● Wedging ● How to use the wheel: ○ Setting up your wheel (bucket of water, sponge, wooden tool, wire tool) ○ Getting comfy with the wheel (play around with the pedal, get close to the wheel) ● Throwing: ○ Centering

		○ Opening ○ Pulling ● Shaping the cylinder ● Taking your piece off and covering it ● Turning clay mishaps into 'rainbow'-shaped pieces
60 mins	**Independent practice & teacher guidance**	● Students practice their newfound skills on their own ● Instructor provide one on one guidance based on student's intentions
30 mins	**Wrap ups**	● Instructors show students how to wrap and how to store pieces ● Cleaning the wheel, tools and areas where students worked ○ Cleaning the wheel ○ Resetting the station (putting the chair and the pedal onto the wheel) ○ Cleaning buckets and tools and returning them to their shelves ○ Re-wedging rainbows and putting wet clay in the reclaim buckets ● Tour of the bisque and glaze firing drop off/pick up shelves ○ Speak to students assessing each piece before you fire it (thinking about whether you want the piece or not) ○ Making sure pieces you put down are at least leather hard, if not bone dry ○ Be careful around your work and that of others ● Brief preview of next week's skill

Resources for week 1

Wedging
https://www.dropbox.com/s/r43dhdcx436jfd7/Wedging.mov?dl=0)

Throwing demonstration
Top view here:
https://www.dropbox.com/s/les43l3f6imnj0s/Throwing-%20top%20view.mov?dl=0
Side view:
https://www.dropbox.com/s/lqoigbzsd2o4210/Throwing%20-%20side%20view.mov?dl=0



There are three (major) stages to keep in mind when working with clay:

- Left: a form that has been thrown (wet clay), trimmed and left to get bone dry
- Middle: a form that's been bisque fired
- Right: a form that has been glazed

Between the beginning and the final product, your form may shrink by roughly 12%. If you're planning projects where you have to be more exact with your sizing, multiply the sizes you're aiming for by 1.12 to find out how large your forms need to be.

It's also helpful to remember that during each step — drying, bisque firing and glaze firing — your form may warp (plates can be particularly fickle!).

Week 2

Duration	Topic	What is covered

15 mins	**Overview**	• Instructor tells students what they will learn today
		• Instructor explains important concepts:
		  ○ What is trimming?
		  ○ What is a foot?
		  ○ How can you examine your piece to know where to trim?

15 mins	**Skill demo & teaching**	Trimming ● How to center a piece for trimming ● Trimming for different purposes: ○ Trimming to even out your walls ○ Trimming for shape ○ Knowing how to gauge thickness fo the walls ○ Trimming a foot
75 mins	**Independent practice & teacher guidance**	● Students practice their newfound skills on their own ● Instructor provide one on one guidance based on student's intentions ● Instructor may do special demonstration or repeat past demonstrations
15 mins	**Cleaning and wrap up**	● Students clean their stations ● Preview of next week

Resource for week 2

Trimming: https://www.dropbox.com/s/ap9xc2czxirbxvb/Trimming.mov?dl=0

Week 3

Duration	Topic	What is covered
15 mins	**Overview**	● Instructor tells students what they will learn today ● Instructor explains important concepts: ○ Types of handles ○ Handbuilding
15 mins	**Skill demo & teaching**	Handles ● Pulled Handles - Extruded Handles - An extruder is a device that applies pressure to a container filled with clay and forces it out of a shaped die, producing a long length of clay with a consistent cross section. Extruders can be large and wall mounted, or smaller and hand-held. By using a die that's the shape you want the final handle to be, you can quickly make multiple identical handles. ● Slab Built Handles - Generally, this is done by taking a slab of clay, and cutting a strip to be the handle. It can be a straight bar of clay, or cut into a more complex shape.

		• Handbuilt Handles - Handbuilding involves shaping the clay by hand. It can be rolled into a coil first, or shaped directly from a ball of clay. There are no tools required. Basic techniques to attach our handle to thrown shapes: • Scoring • Slip • Attaching the pieces
75 mins	**Independent practice & teacher guidance**	• Students practice their newfound skills on their own • Instructor provide one on one guidance based on student's intentions • Instructor may do special demonstration or repeat past demonstrations
15 mins	**Cleaning and wrap up**	• Students clean their stations • Preview of next week

Resources for week 3

An overview from Old Forge Pottery: How To Make Comfortable Mug Handles

Pulling handle video
https://www.dropbox.com/scl/fi/j1c3dildremqg87tkvgzn/Pulling-and-attaching-handles-1.mov?rlkey=uffp18t9z7q6pbtl04eaolrf4&dl=0

Attaching handle video
https://www.dropbox.com/scl/fi/hm65xagd670ntubtuxl36/Pulling-and-attaching-handles-2.mov?rlkey=r5e8ujxz01otg5mvg5g2oiusk&dl=0)

Week 4

Duration	Topic	What is covered
15 mins	**Overview**	• Instructor tells students what they will learn today and explains important concepts What are glazes made of? • Silica (Glass Former): The main ingredient, typically silica/flint, which becomes glass when melted. • Flux (Melting Agent): Minerals like feldspar, whiting (calcium carbonate), or boron that lower the high melting point of silica, allowing it to fuse at kiln temperatures.

		• Alumina (Stiffener/Stabilizer): Usually supplied by clay (such as kaolin), this prevents the molten glaze from running off the pot. • Colorants & Modifiers: Metallic oxides (e.g., cobalt for blue, copper for green/red, iron for brown/yellow) are added to create color. Opacifiers like tin oxide or zirconium can make the glaze opaque white. Selecting glazes using test tiles • Understanding opaque or transparent glazes • Stable and runny glazes • Food safe glazes and non-food-safe glazes Importance of proper glazing for the kilns • Clean bottoms • Leaving an unglazed margin (¼ inch or more) at the bottom of your pot Glazing mistakes • Glaze layers should not be too thick, crack or peel off. Wash off your glaze and reglaze if it is too think • There should be no glaze at the bottom • Combining multiple glazes can make them runny. Only double dip rims
20 mins	**Skill demo & teaching**	Glazing techniques • Dipping with tongs (immerse for 2-3 seconds) • Pouring over a bowl • Painting on with a brush  Using wax resist: Painting wax resist on parts of a pot can will make it harder for glaze to attach to the painted areas and makes it easier for potters to clean those

		areas. Potters commonly apply wax resist to the bottom.
70 mins	**Independent practice & teacher guidance**	• Students practice their newfound skills on their own • Instructor provide one on one guidance based on student's intentions • Instructor may do special demonstration or repeat past demonstrations
15 mins	**Cleaning and wrap up**	• Students clean their stations • Preview of next week

Resources for week 4

Glazing demo video:
https://www.dropbox.com/scl/fi/mhex0pmvsq1wh63hfae25/Glazing-2.mov?rlkey=tx6ldfd9zvj8uq14jj32hbtgg&dl=0

What is glaze? A great, detailed break-down:
https://farandaway.co/blogs/the-artisan/what-is-a-ceramic-glaze
Notes on glazes and food safety:
https://potterycrafters.com/is-pottery-food-safe-without-glaze/
Things to do and not to do when glazing:
https://sparanoarts.com/2017/06/22/glazing-the-elephant-in-the-room/

Week 5 and beyond

Duration	Topic	What is covered
135 mins	**Independent practice & teacher guidance**	• Students practice their newfound skills on their own • Instructor provide one on one guidance based on student's intentions • Instructor may do special demonstration or repeat past demonstrations
15 mins	**Cleaning and wrap up**	• Students clean their stations • Preview of next week

Resources

Shaping a cylinder into a bottle:
Side view:

https://www.dropbox.com/s/kzw5lepxt7hl6qi/Throwing-shaping%20a%20bottle-side%20view.MOV?dl=0
Top view:
https://www.dropbox.com/s/7pos3c965czpf64/Throwing-shaping%20a%20bottle-top%20view.mov?dl=0

Making plates with slab
https://www.dropbox.com/s/ywamrguurdwd9df/Plate-slab-prep.mov?dl=0
https://www.dropbox.com/s/2hgjr6irv6u7z0r/Plate-slab%20on%20wheel.mov?dl=0

Making and trimming a jar
https://www.dropbox.com/s/c0dd3mjdd7ft7p8/Trimming-jar.mov?dl=0
https://www.dropbox.com/scl/fi/6j9b5b4l5b847x6qf2d17/jar-making-trimming.MOV?rlkey=4qmbapu0iofchdqabcdl1u6il&dl=0

On surface decoration
Google doc of decorating techniques
https://docs.google.com/document/d/13ejkHYPfMP9Je9coCg5RprgWrM512TRV-lUVuX_rsbk/

Exercise ideas

Below are exercise ideas that are meant to help students with their technical competency, with their confidence, their independence, and their sense of belonging.

Exercise 1: Discussion

It can be helpful for you to hold regular discussions about the students' creative practices.

The following prompts that can help foster creativity, community, and belonging:

- Tell us about a ceramic that was meaningful in your family?
    - Are there ceramic objects, functional, spiritual or artistic, that you remember growing up?
- Is there a personal or cultural story you are trying to tell with your clay work?

Exercise 2: Working on a common project as a class

Having a creative prompt that every class member follows, allows the class as a whole to learn from how each student may interpret the prompt. It shows how every individual will approach the same exercise while also building technical competencies.

This exercise is inspired by the pitcher exercise from A Potter's Workbook.

The assignment is to make pitchers. Use at least two pounds of clay or more, and keep it simple. Do not make forms that will require turning or trimming, but think in terms of cylindrically derived shapes. [...] It will have a handle and a spout added after it is thrown.

Make a pitcher and think carefully about:

- The form of the vessel: every pitcher is equal containment as it is
  A useful notion for analyzing pitchers comes from Warren Mac-Kenzie. He says pitchers have two parts: a part that contains and a part that delivers the contents.
  Other things to consider:
    - Is there plenty of room for the liquid in the part that contains the liquid?
    - Is the form easy to clean?
- For the handle:
    - Give which part of your vessel contains and which part pours, you may want to think about what the best placement for your handle would be

- For the spout:
    - Spouts can be pulled or applied (built and added to the firm!)

Exercise 3: Creative problem solving exercise

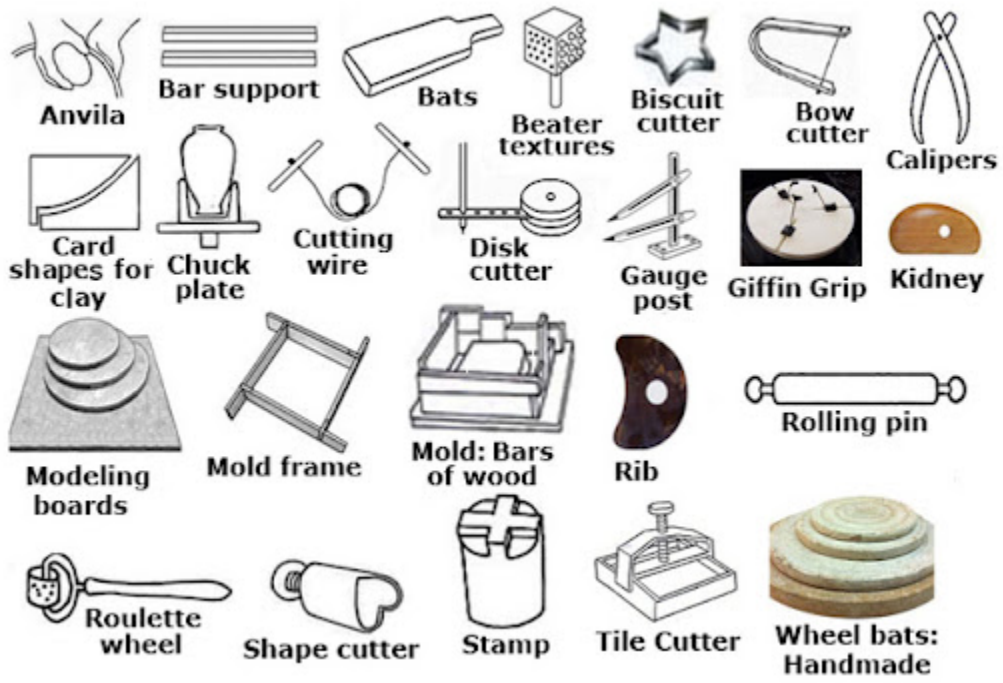
Students often come to class with projects. Instead of simply demonstrating how to make the same project, ask the student and, if they are keen to, their peers how they may approach any given project.

For instance, if a student wants to learn how to make a candle holder, ask them to:

- Plan out the design
- Think about how the skills they already know may be used to execute that design
- Work with their peers to brainstorm different methods of building the same thing

Glossary of terms

Tool names



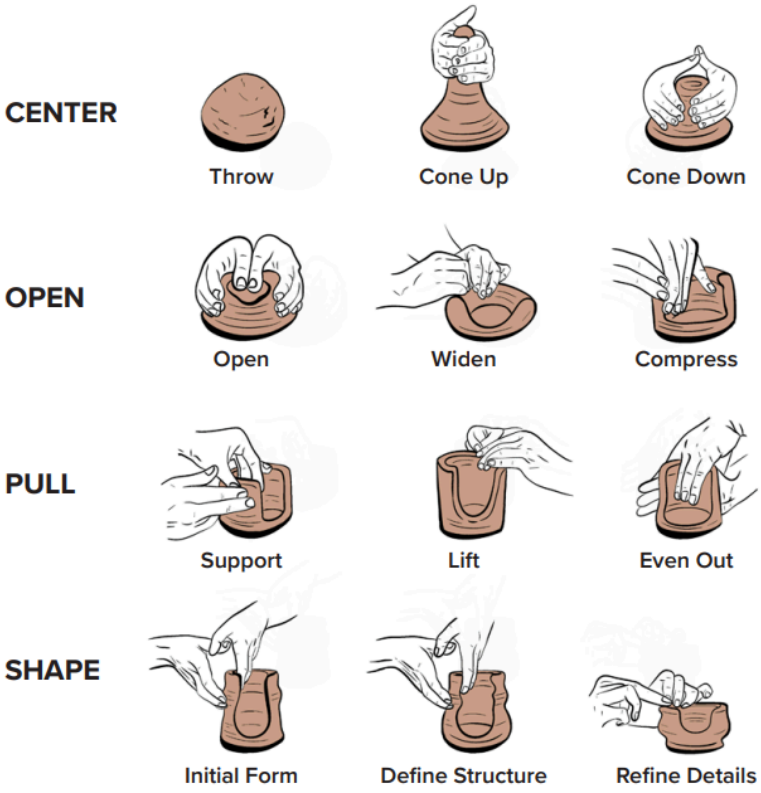
Source: [Ceramic Dictionary]

Wheel parts



Source: [Teachers pay teachers]

Throwing terminology



Further reading

Amaco Glossary of terms here.

Further reading

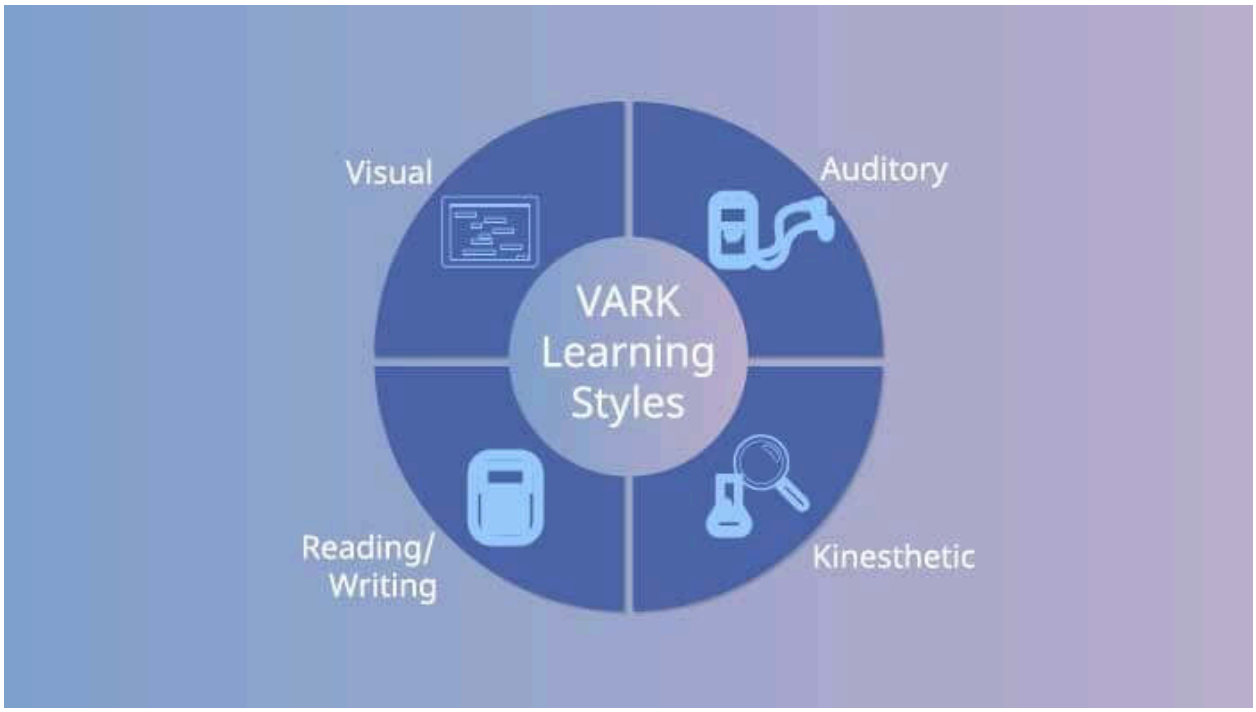
Smartie Goals

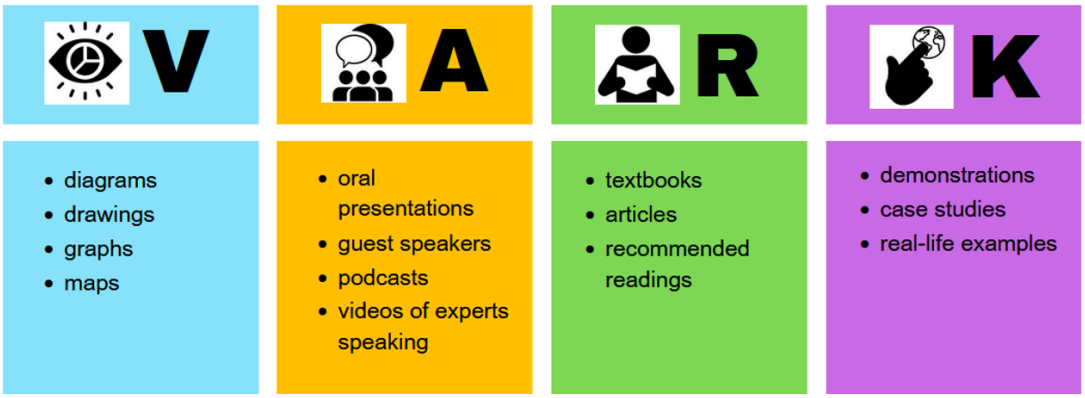
https://www.managementcenter.org/resources/smart-to-smartie-embed-inclusion-equity-goals/

Learning styles

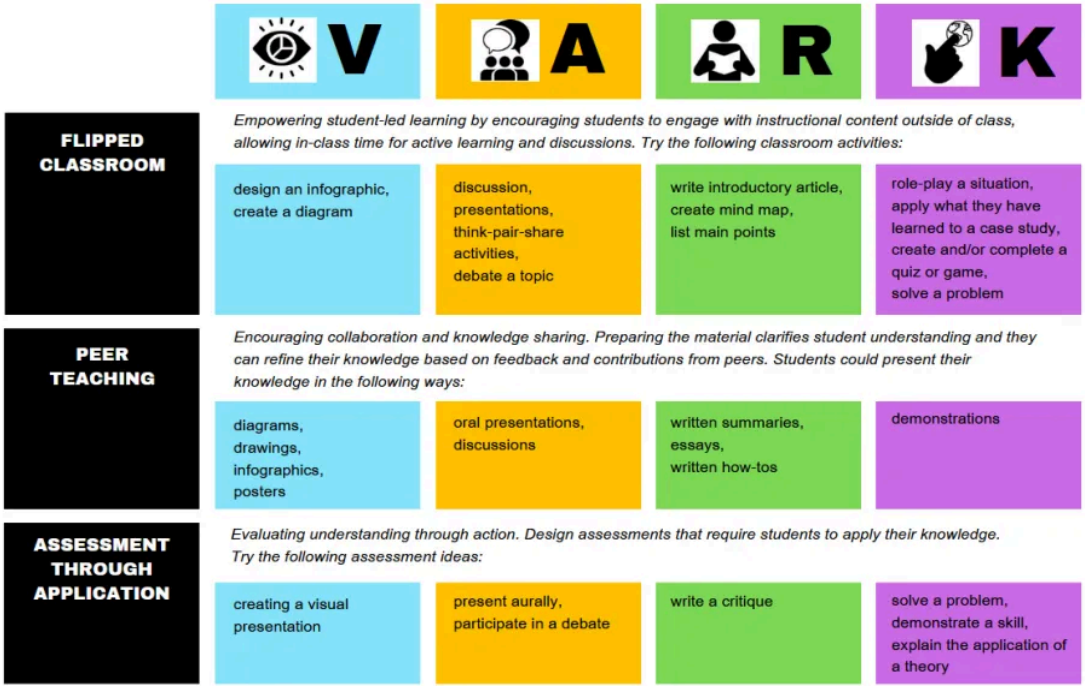
https://vark-learn.com/

The acronym VARK stands for the four VARK modalities – Visual, Aural, Read/write, and Kinesthetic – sensory modalities that are used for learning information.





Source: [Vark-Learn.com]



Different Teaching Styles

Source: [https://onlinedegrees.sandiego.edu/teaching-to-every-students-unique-learning-style/]

Teacher-Centered Approach

The teacher-centered approach to education positions the teacher as the expert who is in charge of imparting knowledge to his or her students via lectures or direct instruction. In this approach (sometimes called “sage on the stage”), students are passive actors or “empty vessels,” listening and absorbing information.

This teacher-centered style is the traditional approach to teaching, but it’s not necessarily the best.

Student-Centered Approach

The student-centered approach creates more equanimity between the teacher and student, with each playing a role in the learning process. In this approach, the teacher is sometimes referred to as the "guide on the side."

While the teacher still holds authority, he or she is more likely to act as a facilitator, coaching students and assisting them in their learning. This approach champions student choice and facilitates connections among students. A couple of styles within the student-centered approach to teaching are:

Inquiry-Based Style
This student-centered learning style encourages independence, autonomy and hands-on learning, with students leading the way and receiving guidance from their teachers.

Cooperative Style
Cooperative learning is a student-centered approach that focuses on group work and social growth. Much like the inquiry-based style, the cooperative style encourages independence and hands-on learning but puts special importance on peer-to-peer work and community.

Source: https://theartofeducation.edu/2023/09/determine-the-teaching-approach-mix-that-fits-your-art-room-best/#:~:text=Here%20are%20the%20five%20main,individual%20needs%20of%20your%20students.

Here are the five main pedagogical approaches:

- **Constructivist**
  Learners are actively involved in the learning process. They create their own meaning and knowledge of the material.
- **Collaborative**
  Multiple learners work together, like in small group instruction. They all contribute and help each other learn.
- **Inquiry-Based**
  Students address real-world problems by asking questions and doing further research.
- Integrative
  Using multiple academic disciplines and a common language, students engage with cross-curricular material.
- **Reflective**
  Both teachers and students reflect on lessons, projects, and assessments to see how to improve them in the future.

Source: https://www.artedguru.com/home/when-students-disengage-from-art

Discussion protocols

Source: https://www.cultofpedagogy.com/speaking-listening-techniques/

On teaching crafts

Source: https://www.craftprofessional.com/teach-crafts.html