

Learning Centers

'Learning centers' are self-contained sections of a classroom, in which small groups engage in cooperative learning.

"Teachers and researchers alike have found that cooperative learning is a high-impact instructional strategy (or a collection of strategies) because it ensures student engagement, facilitates differentiated instruction, allows students to collaboratively construct knowledge, develops communication skills, and prepares students for the work world" (Knight, 2013). A word of caution; it may sound easy creating groups, and having students teach each other, but requires a deep understanding of the 'why,' to ensure cooperative learning does not fall apart. The learning goal, what students must do, and how to behave should be clear, prior to beginning.

Johnson & Johnson (2009) claim there are 5 variables that render cooperative learning effective:

1. Positive Interdependence
2. Face-to-face Promotion
3. Individual & Group Accountability
4. Social Skills
5. Group Processing

Reimagining a class as a series of 'learning centers' is one way to strategically organize cooperative learning, and ensure curricular goals are met. It

provides valuable formative data, and allows time for responsive, personalized instruction and assistance for small groups and individuals.

'Learning centers' also create opportunity for movement; just good teaching! "Researchers have discovered that movement and exercise increase the production of a vital substance called brain-derived neurotrophic factor, or BDNF (Ratey, 2008). This protein supports the survival of existing neurons, encourages the growth of new neurons, and is important for longterm memory formation" (Sousa, 2011).

While effects on learning can be significant when embracing cooperative 'learning centers,' great gains in positive behaviour may occur as well.



ADDITIONAL RESOURCES

Book - 'High-Impact Instruction: A Framework For Great Teaching' by Jim Knight (2013)
<https://www.amazon.ca/High-Impact-Instruction-Jim-Knight/dp/1412981778>

Article - 'Mind, Brain and Education: The Impact Of Neuroscience On The Science Of Teaching' by David A. Sousa (2011)
<https://www.learninglandscapes.ca/index.php/learnland/issue/view/Mind-Brain-and-Education-Implications-for-Educators>



Teaching Blog - 'How To Facilitate Successful Learning Stations In The Secondary Classroom' by Write On With Miss G (2018)
<https://writeonwithmissg.com/2018/05/07/how-to-facilitate-successful-learning-stations-in-the-secondary-classroom/>

Website - 'The Jigsaw Classroom' by Elliot Aronson
<https://www.jigsaw.org/>

Where To Start:

1. Develop a list of rules and procedures to guide small-group learning. Students can help with this to increase buy-in. Review and have visible from each center. Edutopia suggests creating a 'roadmap' or outline of all stations.

2. Decide how to group students, paying special attention to those that work well together. Placing students of differing abilities together may be useful, but perhaps intense, small-group instruction with is a priority, and grouping similar abilities makes more sense.

3. Consider timing, as it is crucial to success. No matter which activities are used in 'learning centers,' students should have 'just enough time' to complete them. One teacher, who found success with 'learning centers,' wrote that for a 42 minutes class she often has five centers students will spend about 5-7 minutes at. There is no perfect prescription for timing, however having a visible timer at the front of the class is helpful.

4. Consider space. Identify the type of movement space needed to effectively deliver cooperative learning activities. Being creative, and redesigning the traditional classroom may come into play here, in order to allow 'learning centers' to thrive. If they are too cramped, this will be conducive to leading students off task.

"I love stations because they allow me to interact with ALL of my students, which is often impossible in a traditional lecture-style whole-class lesson." -Miss G

COOPERATIVE LEARNING ACTIVITIES GREAT FOR 'LEARNING CENTERS'



1. Frayer Model -

This vocabulary development activity has students list a word in the middle of a page divided into four sections. Sections include: definition, facts & characteristics, examples, non-examples. 'Learning center' groups can work collaboratively to complete 3-4 of these during a rotation.



2. Think, Pair, Share -

Students will take a few moments to independently learn and reflect on a new concept. They will then pair up within their 'learning center' group to discuss the concept with a partner, and lastly share each pair's conclusions with their group. Someone in each group should be designated to record these conclusions.



3. Jigsaw -

A jigsaw activity sees each group, or each

member of a group, learning a portion of content, related to a learning goal. Once this step is complete, the student reports back to the group to connect their findings with others. This can be done in a number of ways, and sometimes teachers provide graphic organizers to record learning.



4. Round Table -

This learning activity will allow students to generate information quickly and can be used effectively to review what students have learned, or activate prior knowledge. A piece of paper will be passed around the group, and each student will contribute an answer to a question, or ideas they have, related to a specified topic, before passing it to the next person.



5. Competitive Games -

Including games in your 'learning centers' model can be an effective way of motivating learners, while still hitting curriculum outcomes. (i.e. math bingo, textbook scavenger hunt, dominoes).



6. Small-Group Instruction -

'Learning centers' create opportunities for direct instruction, that target specific learning needs, to small groups of students. Teachers can take advantage of this time to introduce new concepts, review problem areas or enrich learning.



7. Carousel -

Prior to the beginning of class, the teacher places pieces of chart paper around the room with different questions or concepts on them. During a

period that allows about 5-7 minutes per 'learning center,' you may not want to have more than 3 charts, to ensure fidelity. Whenever a group engages in the carousel activity, they will be provided with a colour marker specific to their group, and be expected to visit each piece of chart paper, discuss and write down their answer or thoughts on the topic at hand. Once all groups have rotated through, a rich piece of student-created informational text exists.



8. Peer Assessment -

Students visiting this 'learning center' will provide and receive academic feedback from classmates. Various methods can be used to accomplish this, but first it is important to teach or activate prior knowledge in students about what useful, relevant feedback looks like, within the context of your classroom. This center could be a place where students check each other's homework, collaborate to identify where someone might have went wrong on a problem or task, share an assignment for their peers to assess with a rubric, or proofread and help correct rough drafts of written pieces, as a few examples.

