

Advancing Teaching and Learning: Developing Constructivist Worksheets

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Busy Work or Mindful Thinking?

So, you have a substitute teacher coming in to replace you on Friday, you need a quick, attention-grabbing activity for your students. Or, you just completed a key content unit and have two days before spring testing begins. What do you do? Decide to pop in a movie for the class or create a worksheet? After working with pre-service dance educators for the past 19 years, it is clear to me that not all worksheets and handouts are the same. Popular “busywork” templates such as fill in the blank and word search hold students where they are, valuing the reproduction and memorization of content for an exam. They are weighing down children’s backpacks, wasting time, and diminishing student’s natural curiosity. Unlike busywork, mindful worksheets can be tools for recording experiences while advancing the scope of thinking. Activity-based worksheets can be ideal learning aids helping to (a) reinforce critical thinking skills; (b) encourage the application of knowledge in different ways; (c) foster deeper connections by analyzing past work; and (d) nurture new dance proficiencies.

Constructivist and independent learning can be strengthened by using the guided learning strategies that are prompted in activity worksheets (Calik et al, 2010). Instruction can be flipped, enriching student-centered learning, self-focus, collaboration, and personalized study. See *Action Word Inspiration* by Katrina Brown, which demonstrates how learning can be extended by asking the students to investigate meter, measure, and movement. Also, see Brown’s *Fascinating Creature Signature*, which guides students toward new knowledge construction through participation in individualized or collaborative research on a topic and by delving into the physical formations and extraordinary connections. In the *Fascinating Creature Signature* activity worksheet, students research and identify the unique qualities of different creatures, analyze their characteristics, ponder advantages and disadvantages, and record the most interesting ways that they move. Worksheets are best used when developmentally appropriate

and the learning is linked to both dynamic active instruction and inquiry-based approaches. As such, they can be employed as a pre-test, post-test, or activity staple. Teachers can provide thoughtfully scaffolded questions, guiding students towards a new cognition or metacognitive thinking. Some excellent examples of activity worksheets are: A graphic organizer, planning activity, devise to collect research, a way to record ideas, analyze observations and conduct formative assessment.

Fillers and Subsequent Stillness

Not all worksheets are the same. Many worksheets support packaged recall of facts and rarely advance student thinking or help them to uncover something new. I create worksheets to initiate new discovery and reflection. In planning an activity worksheet, consider how you can increase mindful thinking and deepen knowledge construction in dance. Is it about developing new solutions to a given movement problem, skill building, or creative planning? Completing a worksheet requires a lot of sitting still, which is not easy for children to do. As a fan of moving in dance class, I am decidedly conscious of how long it takes students to complete worksheets. While there may be two or more activities presented in a worksheet, I limit the time-to-complete an activity to no longer than that of the students age.

Good Questions Lead to Deeper Thinking

I am not a fan of word search type or matching type activities because I cannot see the thinking supported within them. Rather, I encourage my university students to scaffold questions that ask the students to reflect on their process. Well-aimed questions guide the students towards deeper personal connection to the concept and can support formative reflection. Concisely sequenced questions can help students develop a chain of reasoning, step-by-step. In your design, consider asking students to weigh-in at different stages within the creative process and not just at the end of the activity. Or ask students to think about what

they learned and how they learned it. A sample question might be: At the beginning of the dance I am thinking about _____. In the middle of the dance I was feeling _____, and by the end of the dance I was reminded of _____. Encouraging students to reflect on what they interpret, see, feel, wonder about, and connect to are important metacognitive approaches.

Quality worksheets promote mindfulness and build a foundation of experiences which create new understanding. This is not easy to do. With practice and following these steps you can create handouts like a pro and use them to boost student learning. Before you begin, reflect on the following seven issues.

Function/objective: Know the reason for the worksheet. Identify the objective and tell the students what they will encounter and learn. Be specific and let the student in on why this is valuable.

Goals: Start the process with a clear understanding of your learning goals, the dance content being covered, and the intended outcomes. Know exactly what you want the students to learn and be able to do as a result of completing the activity worksheet. Memorizing, listing, and sorting dance terms is not advancing student discovery. Rather, it is placing a hold on learning and limiting cognition to mere recall. More effective outcomes would be to focus on researching a topic, describing personal reflection on a process, and collaborative dance planning or analysis among students.



Differentiated learning: When determining the content to be used within a worksheet, consider your student's needs and how the content will come to life on the page and in the classroom. I refer to Howard Gardner's work on multiple intelligences (2006) when differentiating what learning tasks result in increased motivation from the students. Writing response-only worksheets limit learner motivation and engagement. Encourage more than just written responses; ask students to star, circle, and underline key ideas. Encourage students to make comments and predict what may happen next. Provide areas for description and drawing or open areas where students can express themselves without direction.

Audience: Be cognizant of your audience and how, specifically, the students will engage with the worksheet. Take into account the age, skill, grade level, and motivation of the student. The thoughtful presentation of ideas and tasks is necessary. Make sure your content and style meet the age of the learner (i.e. for younger students, provide larger line space for writing and fill-in boxes for drawing.) For older students, increase dance content vocabulary use and support connections to past experiences.

Define the why: Let the students know the reason, function, and purpose of the handout. As with quality teaching, identify for the student what success looks like and how the concepts connect to previous and future work.

Dissemination: Planning for the distribution and collection of worksheets is key. This process takes time and is rarely considered by new teachers.



Define the transitional process so that time is spent on task and not lost while students struggle to find a pencil. Determine in advance the procedures who picks up the supplies, and how are they returned. Set up writing stations ahead of time.

Grading: When planning, consider how many points the worksheet may be worth and how the grade will be considered within the cumulative total grade. If the assignment is just part of the overall skill development, it might be considered an ungraded preparation assignment. Once you have decided objective, goal, audience, dissemination method, and grading, there are a few more things to consider when developing your next mindful worksheet.

Keys Components for a Good Worksheet

Design: Consider the overall look and visual layout of the contents on the page. Take into consideration font size and readability. Plan the space that is necessary for a thoughtful answer. Illustrations can be very useful and can be more effective than a poorly copied photograph that is hard to see and defeats the purpose of making the worksheet in the first place. Be concise. In general, less is more; don't overwhelm the reader with substantial blocks of text to read. Organize information and graphic areas into bite-sized chunks so that it's easier to read and understand. It is best to left justify text blocks for directions, and to bold critical ideas. Watch out for overtly "cutesy" visuals as they may repel your older students.

The Feel: The look of a worksheet should reflect the theme. They do not necessarily need to be



photocopied onto standard 11 x 8.5 paper. Consider using paper plates for solar system study, napkins for the food groups—really anything that you can write on. Paper airplanes and solo cups will work. Go-To worksheets can be laminated for use in year-round activity stations.

Headings: Headings are so important and must contain key content such as a student's name, grade, and class, as well as the title of the unit of study. Headings tell the reader the function and the content swiftly and effectively. It is my experience that a well titled worksheet can peak student's curiosity or turn them off altogether.

Directions: Provide clear directions making sure that you define the stages, steps, and time that is required to complete the worksheet activity. The age of the students will dictate word choice and overall complexity of the task. Use a supportive and conversational tone stating what the student needs to do in simple language. For example, the *Fascinating Creature Signature* activity worksheet states, "Look closely at the fascinating characteristics of your creature, what physical attributes do you see (horns, wings, poisonous tentacles). Notice how these characteristics support the distinctive ways that they move. Once you have completed your research, circle 5 of the key ideas that you feel best describe your creature. Then, embody these ideas to create a short Fascinating Creature Signature phrase."

Page and time limits: One single-sided page is best. Plan carefully for activity completion happening within one class period, if possible. This way the student feels a sense of accomplishment



and knowledge advancement. Consider strictly the length of time towards completion, especially with regards to the amount of time sitting, pondering, discussing, and writing. In my experience, students feel action is better than sitting, and all lessons take more time to complete than anticipated.

Resource packets: When creating mindful activity packets, check the natural desire to make a packet feel substantial by adding filler activities. Choose the content of information on the page carefully so that is both doable and undaunting. If you are diving into a deep theme with a packet of resources, you might ask the students to choose which of the activities peak their interest and meet their needs. This student-centered approach helps the students affirm their importance as critical to the process. By making their own choices, students are in the driver's seat, choreographing their learning.

Digital worksheets: As with printed handouts, digital worksheets can be used as a class or independently, promoting collaborative and critical thinking. Online and digital worksheets require preparation, first knowing the objective, goal, audience, dissemination method, and grading, as well as taking into consideration design, headings, directions, and time limits. They can be as effective as printed activity worksheets; however, educators need to consider carefully the methods for distribution and collection that they will use, as digital storage interface is not always intuitive. Scanning a past printed worksheet will not be successful, and the necessary reformatting to make the worksheet interactive can be time consuming. That said, there are great innovations in this area, and I discuss digital worksheets in upcoming articles.

Conclusion

Teachers and students can see the difference between worksheets that encourage self-

References

- Calik, M., Ayas, A., & Coll, R. K. (2010). Investigating the effectiveness of teaching methods based on a four-step constructivist strategy. *Journal of Science Education and Technology*, 19(1), 32-48.
- Gardner, H. (2006). *Multiple intelligences: New horizons*. New York, NY: Basic Books.



awareness, new discoveries, and “thinking about thinking” and others that are a simple “time suck,” with little scholastic merit. The latter is readily met with groans from students. So, before you Xerox your next 30 worksheets, consider the action and thinking required within the worksheet. For new teachers, remember that any worksheet that is issued needs to be managed, copied, collated, and possibly graded. I have seen worksheets multiply exponentially to be organized in milk crates stacked three-deep. Digital worksheets still need to be organized, shared, and graded. So, when you have limited time in a day, it is best to consider thoughtfully how and when you use worksheets. A good place to start might be your favorite dance creation activity, a multi-stage process reflection, a think-pair-share, or a gallery walk. I have been including the creation of original handouts and activity worksheets in all curricula for the last 19 years. Please check out a few quality examples from my students at this website (centeredindance.com). Do remember that dependent on the task involved, worksheets can easily slip into the busywork category with no meaningful content. So, next time you prepare for a substitute teacher, you will have mindful active worksheets ready to foster student learning and advance the scope of their dance thinking.

Dancers Connect Smart A-B-C Reflection

Name:

Class:



A

Name 3 ideas that you learned today.

*

*

*



B

Name two ideas that you didn't know about.

*

*



C

Draw a picture of something that you learned today.

Mentorship & Dance-Making

Action Word Inspiration by Katrina Brown, 2018

Mentor Name: _____

Mentee Name: _____

Choose at least twelve of the following actions. You may choose more!

Melt	Glide	Bend	Fold	Crumple
Collapse	Roll	Open	Float	Close
Soar	Swing	Grow	Flutter	Spring
Expand	Rise	Balance	Reach	Spiral
Wave	Pop	Whip	Dip	Jump
Slide	Freeze	Drop	Cross	Lean
Fall	Drift	Wobble	Spin	Dab

Choose an order to explore these actions as well as a number of counts to explore each word. You may choose "2" no more than four times. ☺ Write your actions and circle the number of counts you will use to explore each action below:

Action	Number of Counts		
	2	4	8
	2	4	8
	2	4	8
	2	4	8
	2	4	8
	2	4	8
	2	4	8
	2	4	8
	2	4	8
	2	4	8
	2	4	8
	2	4	8

Now, design your dance! Use the space on the back to write any additional notes that will help you remember your piece of choreography!

Fascinating Creature Signature

by M. Parrish

Name:

Date:

Class:

Directions: There are 4 parts to making a Fascinating Creature Signature dance.

Part 1: In Fascinating Creature Signature activity, you and your partner will investigate a creature of your choice. Using websites, books and pictures answer the questions listed below about your creature providing specific details about environment, physical characteristics, movement abilities, and something fantastic. Once you have completed your research, circle 6 of the key ideas that you feel best describe your creature. We will embody these ideas to create our Fascinating Creature Signature.

Provide important details about your creature

Tell me about your creature's environment. Where do they live? Is it warm, wet, cold or dry?

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•

Tell me about your creature's physical characteristics. Look closely for physical attributes. Do you see horns, wings, poisonous tentacles?

•

•

•

Tell me about your creature's movement abilities. "Notice how these characteristics support the distinctive ways that they move. Do they fly, slither, creep or roll?"

•

•

•

Tell me something fantastic about your creature.

•

•

Part 2: Next, we will share the movement ideas that you wrote down in the physical characteristics category in a warmup. Make a circle dance out one of your creature’s movement and your classmates will copy the movement. Go around the circle three times sharing the different ways that your creature moves.

Part 3: After your warm-up, you will create a signature dance about your creature. Make sure to use all information from your research in your dance. The dance must include:

- A beginning, middle, and ending
- A frozen shape to begin and end your dance
- 2 movements that show your creatures environment
- 2 movements that show your creatures physical characteristics
- 2 movements that show your creatures movement abilities and
- A surprise where you show something fantastic about your creature.

***Use the chart below to check the required elements in your dance

Fascinating Creature Signature Check sheet

	<u>YES</u>	<u>NO</u>
A beginning, middle, and ending		
A frozen shape to begin and end your		
2 movements that show environment		
2 movements that show the physical characteristics of your creature		
2 movements that show your creatures movement abilities and		
a surprise showing something fantastic about your creature		

Part 4: Practice your dance, give it a title, choose music and then share with the class.

Part 5: In the space below, describe what you learned when making, dancing and performing your creature signature. On the back draw a picture of your dancing creature.