Smart Games for Smarter Learning

TANGRAMS

Teaching Team Execution: Clinical

Using specialized learning activities and Tangrams

As a result of participating in this activity, learners will:

1. Construct predetermined shapes by incorporating seven pieces from a Tangram puzzle utilizing team skills found in TeamSTEPPS™.
2. Manage team processes to problem solve a simple puzzle collaboratively.
3. Evaluate skills and strategies used by the team to resolve dilemmas presented by puzzles for their efficacy and effectiveness based, at least in part, on the resolution of the challenge in allotted time frames.

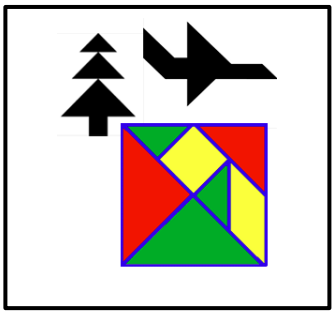


Image of Tangrams which are geometric shapes consisting of seven pieces - arranged into examples of a square, a tree and a plane

Tangrams are a puzzle made up of geometric shapes as you see in the illustration above. They consist of seven pieces which can be combined to create a (typically) 4" square. Additionally, however, those seven pieces can be combined to form other geometric designs, as well.

Materials:

Tangram puzzle pieces

Instructions

1. Assemble students into teams of 5-6 using some method to ensure diversity/interprofessionalism on each team.
2. Provide student teams with Tangrams, which can be assembled on a shared, flat surface.

For additional information about Debriefing, please refer to the Rosalind Franklin University of Medicine and Science Smart Games for Smarter Learning Debriefing Guide Supplement.

References:

Department of Health and Human Services, Agency for Healthcare Research and Quality, & Department of Defense. (Year of publication/last update). TeamSTEPPS: Team Strategies and Tools to Enhance Performance and Patient Safety. [Description of material, e.g., Curriculum, Toolkit, Webpage]. Retrieved from https://www.ahrq.gov/teamstepps-program/index.html

Interprofessional Education Collaborative. (2023). IPEC Core Competencies for Interprofessional Collaborative Practice: Version 3. Interprofessional Education Collaborative. https://www.ipecollaborative.org/assets/core-competencies/IPEC_Core_Competencies_Version_3_2023.pdf

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Lesson	Debrief Questions	Clinical Application	Bloom's Taxonomy	TeamSTEPPS™ Domain	IPEC Competencies
Process: **Round 1:** Learners are presented with simple tasks that allow them to become familiar with how Tangram pieces relate to one another geometrically utilizing the seven pieces to create separate images of a square and a rectangle, both of which are presented in a graphic image that does not identify individual pieces but rather simply demonstrates the overall shape as a whole. Following this activity, reveal the potential solutions, possibly through PPT. **Round 2:** Provide a more complex series of puzzles for teams to collaboratively resolve using just seven Tangram pieces. These may be timed or may be competitive in interteam interactions. Again, following this activity, reveal the potential solutions. **Round 3:** Let only one team member see the target shape, again in the solid black format, and lead his/her team to construct the image without being directly (they must hold their hands behind their back) involvement in the construction. At the end of the activity, the leader shares with the team the image they were to have captured. If they failed to do so in the allotted time, permit them to construct the figure before moving forward	Each round required you to work as a team to find solutions to the given puzzle. In some cases, the challenge was greater than others 1. How did you and your team communicate regarding potential solutions to the Tangram puzzles? 2. What tools to resolve disagreements or potential conflicts did you utilize? 3. What TeamSTEPPS™ skills were involved? 4. Tangrams involved the possibility that a piece of the puzzle might need to be completely reoriented (turned over) from its original presentation. In your team. Were there some people with stronger skills at recognizing that than others? How did you keep people who were less skilled engaged in providing input? In Round 3, only one person was permitted to see the image of the final product. This "leader" was at the end of the activity, the leader shares with the team the image they were to have captured. If they failed to do so in the allotted time, permit them to construct the figure before moving forward. constrained, however, from physically participating in finding a solution. 1. How is that similar on a healthcare team to challenges presented by telemedicine? 2. What are the possibilities that someone may see a solution to a challenge in healthcare even though it exceeds their legal scope of practice? 3. How does team leadership invite or prevent that kind of participation?	1. Just as there are multiple solutions to the Tangrams puzzles, there are often multiple solutions to patient issues. For example, a diabetic patient with multiple comorbidities. How does the team decide on the correct solution to the patient problem? What if that decision not correct? Whose fault is it? (answer to last question - The team) 2. In the Tangrams puzzle, there are different sizes and shapes of pieces. How does this represent the healthcare team? Does this represent a hierarchy? What barriers do hierarchies cause to patients? Providers? 3. Often, individual providers identify different problems for the same patient but cannot solve these individually. What is the best solution?	Analyze / Apply Evaluate / Create	Leadership Communication	Communication Teams & Teamwork

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