



ArtIST

INTEGRATED INTERDISCIPLINARY EDUCATION MODULE ON ART,
ENTREPRENEURSHIP, INNOVATION AND SCIENCE



Erasmus+

Action PI-FORWARD – Support for policy reform — Forward-Looking Cooperation Projects
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Artist Tool: Visual Open Innovation

Artisttb32/ Visual Open Innovation /LUT

Title	Visual Open Innovation
Purpose	The purpose of Visual Open Innovation exercise is to teach and learn open innovation (STEM subject) in a different way, to comprehend the innovation processes and to learn terminology. This tool is fortifying cognition and learning by divergent visual method. It also helps to display students' skills and level of comprehension of open innovation in a student centered and fun way. We used it in open innovation course, but this method is suitable for any STEM subject where students need to memorize the terminology or theoretical concepts.
Description	After the key concepts are discussed in the class, or in the beginning of the next class (when aim is to revise studied concepts), each student selects a card which are put white side top (to keep it secret from others), where word, term, concept, phrase or name of theory is written. Student should not show his / her card to other students. Every student has some time to prepare to explain this card. Students should draw a picture to explain and show to partner (group). Students are not allowed to use any words or letters. If a partner (group) understands, Success! Same exercise can be used
STEM topics covered	In the Visual open innovation exercise, participants can explore several STEM (Science, Technology, Engineering, and Mathematics) topics. Here are a few open innovation topics that could be written on the cards (as many as teacher would like to include into set). As mentioned, the exercise can be done for any other subject. - Inbound Open Innovation - Outbound Open Innovation - Coupled Open Innovation process. - Crowdsourcing - Intellectual Property - Innovation - Business model - Internal R&D - Mergers and Acquisitions - User involvement - Co-patenting - Spin-off - Corporate Venture Capital - Start-up - University-industry collaboration - Joint venture - Company ecosystem "Not Invented Here" "Not Sold Here" - Technology Market - Closed Innovation - Crowdfunding - Globalization

	Absorptive Capacity New Product Development (NPD) Out-licensing Open Source Technology transfer External R&D Innovation Management Innovation Intermediary In-licensing Innovation community Cross-licensing “Not all of the smart people work for us” Patent License Networking
Arts topics	In the Visual open innovation exercise students can visual arts, comics, theatre or pantomime (performing arts) in order to explain the word mentioned on the card.
STEAM approach explained	The Visual open innovation exercise promotes STEAM collaborative learning by encouraging participants to bridge the gap between art and STEM disciplines. By working in teams and applying art methods to study STEM concepts, students learn faster and in a more friendly way. This approach enhance problem-solving, and creative skills, art thinking, preparing individuals to address complex challenges with a multidisciplinary perspective.
Setting	Traditional classroom with whiteboard should fit well for such workshop. Flexible seating arrangements is preferable.
Time frame	30 min, but can vary depending on number of students in the class
Group size	The total participants in class about 50. Groups of 2-4 people for exercise.
Schedule and activities	1. Introduction of the exercise by facilitator, explaining the rules, organizing groups (if any), distribution of drawing supplies and paper (5 min). In the same time course assistant distributes cards on the table, white side up 2. Each student selects one card (5 min) 3. Time to think and draw (10 min) 4. Show pictures to other students in the group, try to guess the words. Students are not allowed to use any words or letters. (10 min) 5. If a partner (group) understands, Success! 6. Next round 7. Q&A and reflection session (2 min)
Age group / level of study	BSc, MSc, PhD No strict limitations but suitable for university level students and trainers
Preparation needed / pre-requirements	Teacher should select, print and cut cards with core concepts No prior drawing/theater experience is required. Participants should come with an open mind, a willingness to participate, and a readiness to engage in creative problem-solving.
Instructions for students	• You will get a (secret) randomized word, concept, phrase or theory to explain • Draw a picture to explain and show to partner • You are forbidden to use any words or letters

	If your partner understands ☑ success!
Instructions for facilitators	Teacher should select, print and cut cards with core concepts. Teacher should introduce the exercise, monitor time, and ask groups to show the best picture to class, who guesses first gets some extra points.
Lessons learned	Drawing or performing the words, concept makes students memorize them much faster. Students enjoy this game and collaborative work and show better results on the test.
Additional materials	Cards Pencils, paper
Inspiration if any, sources	
Show me more (button)	
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