



GOOD PRACTICES IN STEM EDUCATION

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| Title | Science Day – Become an expert for my city for a day |
| Brief description | <p>The practice concerns the institutionalization of Science Day at secondary education. Schools may participate in Science Day if they wish and organize plenty of learning, experiential and other activities. Its institutionalization will motivate the school community. A certificate of participation will be provided as a reward to all students and teachers that were involved.</p> <p>Especially on this day students will implement the experiential activity “Become an expert for my city for a day” in cooperation with local authorities, local organizations or professionals, as a part of a school project or subject.</p> <p>The methodology applied in the practice is authentic learning. It is real life learning that motivates students to learn by doing in real life tasks and so to create a meaningful learning outcome. The suggested techniques are six thinking hats and jigsaw. Six thinking hats engage students in a productive thinking process. Jigsaw promotes creative cooperation in learning groups.</p> |
| Level | Secondary education |
| Advantages Why is it innovative/ attractive to students? | <p>The practice is innovative because it applies the experiential and authentic learning in STEM education. Students take on a task/role in cooperative learning groups and they experience the application of scientific knowledge by experts in real life in many ways such as job shadowing (accompanying the expert). Students also develop metacognitive skills and active citizen skills.</p> |
| Teachers’ opinion | <p>The practice is flexible as each school can organize its own Science Day suitable for its own students according to their educational needs. Each participating teacher is free to design his/her own experiential/authentic activities and use the preferable instructional method/technique.</p> |
| Students’ opinion | <p>The practice is attractive because it brings students close to real science and offers them the opportunity to gain unique experience through learning by doing.</p> |
| Difficulties | <p>The experiential activity “Become an expert for my city for a day” has to be well prepared from both teacher and expert.</p> |

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| Further information / Case Studies | science day: https://www.youtube.com/watch?v= BiWN5yzAbxg |

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| References | authentic learning: http://authenticlearning.weebly.com/ six thinking hats: http://apostolakakis.blogspot.gr/p/blog-page_3.html http://www.debonoforschools.com/asp/six_hats.asp jigsaw: https://www.jigsaw.org/ |



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