Learning Activity 2

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| **Activity Type**:                Collaborative Decision Making |
| **Learning Solution Type**:   Asynchronous online  learning |
| **Assigned Topic:**           Aeronautical observers |
| **Team Name**:                  Cumulonimbus (Lara Nikitina) |
| **Title of the activity:**               Producing clear and accurate METAR using suitable terminology for a variety of weather conditions |
| **Instructions to students** (what do they need to know to participate in the activity, how are they grouped, how will outcomes be shared for feedback)  **Idea** - it is a special activity for the future observers or forecasters during summer field practice (in RSHU in Sankt-Petersburg, Russia, we have such kind of practic, when forecasters work on their own as weather observers for a month in special summer campus). One of the additional activity in that case could be METAR coding (inspite of that it doing automatically). In the cases of very complicated weather, the collaborative decision working is needed to make a correct METAR.  Also it is suitable for the the pre-working special trainings, when observers are located in stations, in some different hard-to-get areas. As the station has lack of observer, sending observer to training center for study could limit operational/performance of the station.  As stations could be in different time zones (like in Russia - 9 zones), the learning activities are mostly asynchronous.  Pretend, you are a person, who is doing his shift work, observing weather. You are expected to be clear and accurate in producing METAR using suitable terminology for a variety of weather condition. The aeronautical forecasting results depend on your product.  **Student - observers** on the last year of meteorological studing or forecasters at the middle of basic meteorological studing course.  Learners initial level of preparation - students have knowledge on some basic meteorology, can understand different weather conditions and know METAR codes.  Each student works independently, observing weather conditions and coding METARs (if it is impossible to make such field work, it can be simulated or made by role-play). The example of such simulation  <http://metar.e3w.ru/chart.html> (sorry, only in russian language).  If student is lucky to have simple weather conditions during his/her shift, Asynchronous Collaborative Decision Making Process is to be initiated by the trainer (via the Moodle page). All the rest students have to participate in that Process.  **Timing (can vary)** -  Since the practice period lasts for a long time, such kind of LA is supposed to be used many times during 1-2 monthes as it is a need to observe all weather types and it need not take a lot of time every day. |
| **Roles of trainers** (how will you set up and guide the activity)  The trainer sets, before the start, a special page in Moodle, provides a forum for discussion weather conditions, METAR coding and making collaborative decision of coding in the case of a very complicated weather. The trainer only participates if the students feel stuck in their working and only after they have made a first decision in coding. The help of the trainer is limited.  The trainer is involved in initial explanation, guiding the activity of discussion,  monitoring it, assessment, providing feedback to other students, sharing tips and tricks they can use in the METAR coding. |
| **Supporting resources** (what data, instructions, technologies, instructional resources, etc. will be required)   * PC with internet connection, * Real or Simulated weather observing devices, * METAR/TAF List of Abbreviations and Acronyms, * any Moodle sites, that could be used for forums, * any other supporting materials (lectures, manuals) |
| **What is the primary thing you want students to learn?**  Learning goal:   * Mastering to write the clear and accurate METAR for variety weather condition (especially in complicated weather), * Ability to make shifts independently, become more confident in coding, * To find collaborative solutions (to participate in a decision making process) in the case of  a complex weather situation.   Training goal:   * Checking skill/ students’ ability to write the clear and accurate METAR and translating/ transforming from variety weather condition to the METAR symbols, * Checking students’ ability to participate in a decision making process and find solutions. |
| **How will you know if the activity was successful?**   By the trainer:   * METAR correctness (first, by the students as self-assessment, finally - by the trainer), * the performance of the students activity in coding, discussion forums and solutions. |
| **Any additional notes you want to include.**  I do know that it sounds a little bit unreal but this activity could be very useful to the aeronautical observers to make them more confident before they start working.  They might need some exercises to be a master in writing METAR especially in a complicated weather. Trainer could share his/her tips and trick in coding weather in the complicated situations. |