## iMAGiNExpo Project-Based Learning imagine\_factory assignment and submission checklist for students

**iMAGINE** = Inventors, Musicians, Artists and Authors, Genius Geeks and Gamers, Innovators, Non-Conformists (those who think outside the box), and Entrepreneurs

The iMAGiNExpo will showcase winning digital media inquiry-based and project-based learning and research presentations by some of the finest creative high school student teams of the Cincinnati/Northern Kentucky region at a free mini-convention that spotlights and supports creativity and innovation. As an official program of NKU Steely Library's IPAC (Intellectual Property Awareness Center), student submissions must respect the intellectual property rights of others. The public venue is scheduled for Saturday May 17<sup>th</sup>, 2014 between 1:00 pm and 4:00 pm at the newly renovated Covington location of the Kenton County Public Library at 502 Scott Blvd. Anyone from the general public is invited to attend, as professional organizations tied to creativity and innovation will also exhibit. In addition, a panel of professional experts will speak about their creative and innovative organizations to assist both students and the general public from inventors to musicians. Plus, an engaging and informative presentation about superheroes and intellectual property is planned for younger children too.

**Assignment charge:** Imagine that you are professionally working in one of the S.T.E.A.M.\* disciplines. Your employer has assigned you to a special collaborative team project that requires research, analysis, critical thinking, providing evidence, and communicating with clarity and authority to identify problems/opportunities and suggest proposals aimed at creatively solving those problems. Your hypothetical employer expects complete professionalism, including respect for the intellectual property of others such as citing references, as well as an understanding and presentation of some of your own intellectual property rights, e.g. copyrights, trademarks, patents, etc.

\* Science (including Health and Medical); Technology (including Engineering); Entrepreneurship (Business and Marketing); Arts (including Fine Arts, Humanities, and Social Sciences); and Mathematics (including Finance and Economics).

The following are merely offered as *examples* of possible research presentation projects in each of the 5 STEAM discipline areas. *Refer to your librarian or teacher for project deadlines*. Students are free to borrow or expand upon these examples, or to identify their own problems/opportunities (feel free to consult with your librarian or teacher):

SCIENCE (including Health and Medical): Your team works for a small, regional Biotech firm. The CEO (Chief Executive Officer) of your company has asked your team to investigate possible treatments for cancer and to submit a 5-year plan for finding a new drug/treatment for at least one specific form of cancer. The firm does not have the finances or personnel to pursue multiple projects. Your team must decide what type of cancer the company should investigate. You know that your team, to make an informed decision, will need to research what types of cancer drugs/treatments are being investigated currently worldwide. Will the type of cancer you choose to investigate be more prevalent in a particular region? Among a certain gender or age group? Why did you choose that type? What are your plans to move forward? Will you pursue a grant? Align your company with a hospital research group?

**TECHNOLOGY** (including Engineering): Recently, Amazon announced that it was investigating the possibility of using drones to deliver its products to customers' doors. The CEO (Chief Executive Officer) of your mid-sized company has asked your team to investigate the possibility of using drones to pick up materials for its assembly line from suppliers, as well as to deliver your products to its customers. Your team needs to consider all of the possible positive and negative effects of using drones. What complications could arise? Currently, is the technology possible at a reasonable cost? What technological hurdles need to be overcome? How do you align the technology with other challenges, such as liability insurance? The CEO wants your team to recommend whether to proceed or not to proceed.

**ENTREPRENEURSHIP** (including Business and Marketing): Your team works for a small upstart Webtech company. The company is investigating possible apps for mobile phone customers. The apps cannot be free, and must be able to generate needed revenue streams for this young company. What types of apps are needed nationally, or even internationally? What types of apps have been overdone? Can your app include advertising to augment revenue? Can you identify a niche market that has not been served? Your CEO wants a proposal for the next three years.

ARTS (including Fine Arts, Humanities, and Social Sciences): Your team works for a small regional museum that includes Art, History, and Natural History exhibits, as well as programming (fine arts performances, literary/poetry readings, and lectures). The Director of your museum has asked your team to recommend a new "blockbuster" permanent exhibit, and related programming, that will appeal to a younger audience. The Director has stated that the museum needs to increase ticket sales and memberships in an age group ranging from 16-29 years of age. What will your team recommend in terms of an exhibit and programming? Will it include new technology? Will it be affordable? Will there be a virtual website presence? If so, how do you sell tickets without giving it all away for free online? How will you market the new exhibit and programming?

MATHEMATICS (including Finance and Economics): Your team works for a "thinktank" company. The federal government has awarded a contract to your company to devise a completely redesigned federal financial aid program for college students nationwide. The new program must be affordable for students and the government alike. The federal government is especially concerned about the growing default of students on their college loans, as well as about the rising costs of a college education. Your team's plan needs to address these issues and to make financial sense. You will need to research such topics as: How much tuition do college students pay annually nationwide? How much financial assistance does the federal government provide? State governments? Private scholarships? Loans? Local grants? What percentage of loans are in default? Your team may decide to use formulas, spreadsheets, pie charts, etc. to illustrate its findings and its recommendations.

- Describe your project in an electronic format of your choice (choose one):
  - Documentary;
  - PowerPoint or Prezi;
  - Video-recorded experiment or demonstration;
  - Video-recorded new product or invention;
  - Video-recorded theatrical performance;
  - Video-recorded musical performance;
  - Video-recorded poem or story;
  - Short animated feature:
  - o Computer video game;
  - E-book, such as a graphic novelette.
- Your imagine\_factory creative/innovative team's project work must utilize one of the following digital formats: flv, asf, qt, mov, mpg, avi, wmv, mp4, 3gp, rm, or m4v. The presentation running time must run at least 5 minutes not exceed 8 minutes.
- All works should be the original works of the students. Parents, teachers, and
  others may inspire students but should not do the work for the students. If
  students are presenting their own mash-ups or Fair Use portions of others
  please, refer to the following Fair Use background sites to assure that your use is
  indeed Fair Use and not an infringement:

http://ipac.nku.edu/worksofothers/fairuse.html

http://www.ismf.net/resources/fairuse/

http://www.cmsimpact.org/fair-use/related-materials/codes/fair-use-codes-best-practices

IMPORTANT NOTE: The iMAGiNExpo judges and event facilitators reserve the right not to award to those submissions that potentially violate copyright infringement or lack credit attributions for the use of others' intellectual works.

- Remember to include a title page or title prompt at the beginning of your presentation or creative work with a project title, school name, and student team names of all participants (no more than 4 students per team submission). This title page information ensures that iMAGiNExpo can provide certificates and prizes to all student producers of award-winning digital media projects. More detailed credits, for example evidence supporting sources utilized for content presented, should be posted at the end of your presentation or creative work.
- Your school will conduct an onsite contest to determine the winning representative of your high school for each of the STEAM subject discipline categories: Science (including Health and Medical); Technology (including Engineering); Entrepreneurship (Business and Marketing); Arts (including Fine Arts, Humanities, and Social Sciences); and Mathematics (including Finance and Economics).

- All schools' five winning representative entries (one per each STEAM subject discipline) for every high school must include parental/guardian permission forms to qualify to be judged at the regional iMAGiNExpo level as potential regional award winners. Winning students will be notified so they may attend the public iMAGiNExpo event. Watch the <a href="http://creativethinking.nku.edu/">http://creativethinking.nku.edu/</a> website for parental permission forms, and winners' award and prizes updates.
- Up to five winning submissions from each high school (one per each STEAM subject discipline) must be submitted via email by the onsite school librarian or designated teacher to imaginexpo@gmail.com. Email submissions from students directly will not be accepted. Alternative submission deliveries via postal mail may include a CD-ROM or DVD Standard 1 (US) sent to the primary iMAGiNExpo facilitator. iMAGiNExpo is not responsible for lost, damaged, or non-functioning entries. Media mailed to iMAGiNExpo will not be returned. Always send a copy of your work, not the master work or the only CD or DVD. Test your digital media project on multiple devices to assure playback on other devices. Deadline for each school's representative entries is March 31, **2014.** Assignment format and time length must meet the requirements for initial projects in local school competition. If more than one entry (for the same subject discipline) is submitted from the same high school, those entries will be returned to the school librarian or teacher for them to determine the winning representative of that STEAM subject discipline for their school. Then that determined finalist should be resubmitted within one week to qualify for the regional iMAGiNExpo competition.
- See your school librarian or teacher for questions about contest grading and judging rubric (listed at the end of this document).

NOTICE: The iMAGiNExpo facilitators reserve the right to change and revise this student entry guideline form as needed for the greater good of the event. See <a href="http://creativethinking.nku.edu/teachersguide/imaginexpo.html">http://creativethinking.nku.edu/teachersguide/imaginexpo.html</a> for latest information.

Thank you for your participation and support of the iMAGiNExpo 2014. For other details about iMAGiNExpo, contact John Schlipp @ schlippj1@nku.edu.

JCS 10 February 2014

School:			
Teacher/School Librarian:			
Group Members:			
STEAM Subject Discipline:			
Creativity and Innovation	Critical Thinking	Communication and Collaboration	Evidence and Intellectual Property
30 Points	20 Points	30 Points	20 Points
(10 pts. each):	(10 pts. each):	(10 pts. each):	(10 pts. each):
1) Defines the overall team project in an original manner.  2) Explores related questions and/or problems associated with the team project.  3) Presents the team project in a creative/innovative electronic format.	1) Analyzes and synthesizes research/information related to the team presentation project.  2) Evaluates information competently and logically, using appropriate examples.	1) Understands their audience.  2) Communicates the team project with clarity and authority.  3) Exhibits proper grammar/word choice/spelling/pronunciation.	1) Identifies sources of information (e.g. list of sources used).  2) Exhibits fair use portions of others' copyrighted and/or trademarked works, properly cited.
CCSS.ELA- Literacy.WHST.11-12.7 CCSA.ELA-Literacy.RH.11- 12.7	CCSS.ELA-Literacy.RH.11-12.9 CCSS.ELA-Literacy.RST.11-12.2 CCSS.ELA-Literacy.RST.11-12.3 CCSS.ELA-Literacy.RST.11-12.7 CCSA.ELA-Literacy.RST.11-12.7	CCSS.ELA-Literacy.RST.11-12.3  CCSS.ELA-Literacy.RST.11-12.3  CCSS.ELA-Literacy.RST.11-12.9	CCSS.ELA-Literacy.RH.11-12.1  CCSS.ELA-Literacy.WHST.11- 12.8  CCSS.ELA-Literacy.RST.11- 12.1
Notes			

iMAGiNExpo RUBRIC (of 100 points) tied to CCSS