

Creativity Education Training Brainstorm Results

The basic elements of the brainstorm session results are provided below. They include a 1) brainstormer summary and statistics for the session, 2) complete transcribed and broken down idea list with two iterations of top idea selections, 3) "after the storm" analysis from the group on page 18, and 4) idea themes on page 22. This idea and analysis data then goes into a more formal report and individual concepts get built and advanced down the innovation pipeline. An example of a formal report is the Innovation Culture Report that you also have access to as a part of the BrainReactions webinar program.

	Brainstormer	Quantity of Ideas	Amount of Quality Ideas
1.	(DE)	136	29
2.	(SB)	57	22
3.	(SH)	42	11
5.	(DC)	27	8
6.	(DJ)	127	29
9.	(JL)	52	10
10.	(SN)	30	5
11.	(RS)	64	10
12.	(MG) Idea capture & Analysis only		
			-
Total		535	124

All ideas are tagged with the brainstormer's initials who generated the idea or analysis.

BrainReacti@ns

Complete Idea List with Analyst Idea Selections Highlighted

Selected Idea – The best ideas Refined Selected Idea – The best of the best ideas

==== 1. Introductions: How did you learn to be more creative? What happened in school or in your life that led you to be a better creator, artist, idea generator, etc. ====

- Through work at BrainReactions, having to come up with ideas. (DE)
- Research as grad student, identify problems and opportunities, then creating solutions. (DE)
- By reading a lot, very different things. (DE)
- Having different hobbies, pastimes, sports, intellectual interests, and bring them together. (DE)
- Hanging out with interesting people. (DE)
- Diversity of people. (DE)
- Learning brainstorming techniques.. (DJ)
- Odyssey of the Mind and Destiny of Imagination. (DJ)
- Poorly defined projects, building a device that does certain things with novel materials like recyclables, etc. (DJ)
- Things that force you to challenge yourself. (DJ)
- Performing outside your comfort zone. (DJ)
- Playing with Legos. (SB)
- Coming up with problems, creating my own solutions. (SB)
- My father who has crazy contraptions. (SH)
- Interested in sewing, textile arts. (SH)
- Having those pastimes helps you create. (SH)
- Different areas of research. (DC)
- From China, so I have a different cultural perspective. (DC)
- Legos. (JL)
- Interested in design of any kind: Textiles, cars, etc. (JL)
- Theater improvisation; Comedy Sportz in Milwaukee; improv troop. (JL)
- Being really lazy and discovering short cuts. (RS)
- Hated doing homework, tried to find ways around it. (RS)
- How to skip school, etc. (RS)
- Never wanted to get a job, how am I going to get money without working? (RS)
- Helped produce new TV show. (RS)
- Running own company, flyingcart.com. (RS)
- The arts. (SN)
- A lot of music production. (SN)
- Instrumentals for artists. (SN)
- Drawing. (SN)



- Movie productions. (SN)
- Analyzing things from different perspectives, understand things as a whole. (SN)
- Talking to people is a big influence. (SN)

==== 2. What could education for creativity be like at the college level? What would students do or be exposed to? ====

- Promote groups with members form different academic backgrounds. (DJ)
- Cover more ground with people from multiple majors. (DJ)
- See the product of different kinds of thinking. (DJ)
- Fixing a broken device you're not used to using. (SB)
- Creativity team at a university. (DE)
- Whole purpose of team is to come up with ideas, solutions. (DE)
- The arts as a required class. (DE)
- Creativity grants offered by university; grant for \$500 to work on project of creating something. (DE)
- Hold a class where people in majors that learn design can go to learn how to make models. An interdisciplinary models class. (RL)
- Class about recycling; take trash, make products. (RL)
- Send emails to students, ask them to generate ideas, make a ranking or competition. (DC)
- When you start school, you are supplied a problem in society; goal is to tackle program and create solutions. (DE)
- Problem related to your major. (DE)
- Have students modify existing products to achieve better results. (SB)
- Give people model rockets, make them go 20 feet higher than they're supposed to. (SB)
- Creativity or ideas within the building. (JL)
- Allowance for people talking about ideas/creativity. (JL)
- A hallway, people walk through it, put a post on the wall. (JL)
- Purple capes that are available throughout campus that you wear when you feel like being creative. (DE)
- Creativity Olympics during All Campus Week. (DJ)
- Different groups compete against each other. (DJ)
- Specific student group designed to introduce different groups to one another. (DJ)
- Different groups can tackle tasks that they have in common or work with a third party like Habitat for Humanity. (DJ)
- Coffee shops and the Shell, the SERF, should have game shows with brainteasers on TV instead of CNN. (DJ)
- Be creative while relaxing or working out. (DJ)
- Awards for most creative in intramural sports. (DE)
- Instead of regular labs, having lab that meets every other week for ideas. (JL)
- Community board comes to a classroom and discusses problems with transportation. Allow students to suggest ideas. (SH)

- See your ideas in action. (SH)
- Online forum with cash rewards for good ideas. (SB)
- Program for studying at different locations, cities. (DC)
- Classroom teaching around UW system or in different cities. (DC)
- Give someone \$1,000 and tell them to turn it into \$2,000. (RS)
- Launch it or fail. (RS)
- Launch week: One week out of the month, people are launching stuff. (RS)
- Best launch could be given a prize. (RS)
- Upper level general education courses perhaps in creativity. Give people a more diverse education and bring them together to create ideas. (SH)
- Graduate degree in creative studies. (DE)
- Take whatever classes you want to. (DE)
- Final project is to create something big and cool. (DE)
- Design your own lab experiments. (DJ)
- Get to understand things behind what you're working on. (DJ)
- Class in different buildings during the semester; get in a different mindset. (DJ)
- Brainstorm cape; tackle the person with the cape, have to challenge them to an Idea Off. (DJ)
- Whoever wins takes the cape. (DJ)
- Purple spray paint that you can write around campus. (DE)
- After all your labs, the final lab is where you design a previous lab but make it better. (SB)
- Suggest a better-rounded course load. (SN)
- Opportunity to learn about many different topics. (SN)
- Get a better understanding of what they are working on. (SN)
- More Liberal education. (DE)
- Creative van, bust into classrooms, show them how to make the class more creative. (RS)
- Every student should have creativity toolkit when they start. (DE)
- Tools, techniques for generating ideas. (DE)
- Notebooks should have a column so you can doodle. (SB)
- Student committee that takes general problems and tries to fix them. (SH)
- Better course evaluations. (SH)
- Teach a one credit class if you are really good at a certain subject; This would help develop teaching experience. (SH)
- Building on campus just for ideas. (JL)
- Idea mascot, roams around. (JL)
- Multi-person painting. (RS)
- Becomes this huge piece of art after a year. (RS)
- Huge mural, you have to represent yourself on the mural of the whole university. (DE)
- Scrolling whiteboard with bubbles and to/from arrows. (DJ)
- People see connections between different things. (DJ)

- Creativity team should have a t-shirt launching gun. (DJ)
- More emphasis on foreign language. (DJ)
- Makes me think in a different way, different ways to express yourself. (DJ)
- Required to go to a different country for a semester. (DE)
- Take a class with no professor or books, figure it out on your own. (RS)
- Random days where the class has to create what they are doing that day. (DE)
- Start with questions on the board, figure out how to get to the answer without instructions by the end of the class. (SH)
- Question based learning. (DE)
- Intentionally take away accessibility/resource from class; people have to figure something out. (DC)
- Adopt a kid that has no outside information at all, no outside world thinking. (RS)
- Everyone has to view how he takes on problems. (RS)
- Put him in a forest and see how he does. (RS)
- Theater labs for every major. (JL)
- Free improv shows around campus, in the street or in a theater. (JL)
- Design class in theater. (JL)
- Ideas you generate must come through improv. (JL)
- Have alumni who are working at a company bring in problems that they recently solved and see how current students solve it. (SB)
- See case studies and find out how they were solved. (DE)
- How the idea came about, how it was solved. (DE)
- Inventions course. (DE)
- Get paired with an inventor as a mentor. (DE)
- Inventors in the community that you can communicate with and learn from. (DE)
- Overseas brainstorming with pen-pals or chat rooms. (DJ)
- Write own test questions on every test. (DJ)
- Challenge students to reduce their CO2 footprints once a month; cut out waste in their life. (DJ)
- Brainstorming text messages. (DJ)
- Brainstorm with companies at career fairs. (DJ)
- Surprise program/group. Every week, they do something new that surprises them and makes them think creatively. (DE)
- Every university should adopt a big problem/cause and change it every semester. Students should be recruited to solve/address it. (DE)
- Global warming this semester. (DE)
- All students have to help creatively address/solve that problem. (DE)
- Wear your own clothes; make your own, wear them. (RS)
- Everyone has to do it. (RS)
- Dress as a robot day. (DE)
- Live with someone new every week. (RS)
- Drawing day; everyone, regardless of talent, draws and puts it up and shares it with everyone. (?)



- Challenge to play the most elaborate prank on your housefellow if you're living in the dorms. (DJ)
- Whoever's housefellow is most angry at the end of the day wins. (DJ)
- Change your classroom location frequently. (?)
- Buildings on the campus made of big Legos. (DE)
- Project every semester for students to build it. (DE)
- Group meeting. (DE)
- Temporary structure. (DE)
- Require students to join a club. (SB)
- Limited resources for solving a problem. (SH)
- Every student should be assigned to a group that is utterly diverse; different cultures, majors, etc. (DE)
- Meet with this group once a week, talk about what they are working on/developing creatively. (DE)
- Regulations cannot work in the same group of people across different classes, different projects. (DC)
- Students have to work with different people. (DC)
- Become a student leader. Being a leader forces you to think in a different way. (DJ)
- Communicate with different types of people. (DJ)
- Encourage community service projects involving the rest of Madison. (DJ)
- Interact with the city's liberal east, conservative west. (DJ)
- Provide creative programs like PhotoShop for free. (SH)
- Show people how to edit videos, create music, use PhotoShop, etc. (RS)
- UW SWAP: Source of furniture and electronics. Take stuff from there, free for students to use in creativity projects. (DJ)
- Take SWAP items apart, create new things from furniture and electronics. (DJ)
- Have a friend who makes creative things randomly like potato gun. (SB)
- Mark down problem/solution on the sidewalk, like in Hollywood. (DC)
- Walk of Fame on campus. (DE)
- Cylindrical board; List problems and allow students to offer ideas and solutions. (DJ)
- Cylindrical kiosk dedicated to problem solving ideas and postings. (DJ)
- Ag department already has hallmarks of fame posted around campus. (SB)
- Do it all around campus. (SB)
- Patent wall. (DE)

=== 3. What would education for creativity be like at the middle or high school level?

- Middle and high school students are in their own world; no one understands them. (SN)
- Try to understand their culture/understandings. (SN)



- Reach them with activities in regards to pop materials. (SN)
- Connect through pop culture. (SN)
- Egg breaking competition; design a car that could sustain the biggest load. (SB)
- The name game throughout history. (SB)
- Who can make the craziest graph in math class? (SB)
- Who can use the most alliteration in a story in English? (SB)
- Once a year, each student has to plan/deliver their own lesson plans. (SH)
- Bring problems from college labs to high school students. (DC)
- Offer college credit to those who have the best ideas. (DC)
- Have one idea/topic and give it to different classrooms. See where they take that idea. (JL)
- Creative writing class or theater lab; see where they take it. (JL)
- Everyone works it out in their own medium. (JL)
- Most creative profile on facebook. (JL)
- One year traditions by teams in high school. (JL)
- Free style Friday. (SN)
- More rigid requirements for foreign language. (SH)
- Take 2 different languages. (SH)
- Have problem solving detention instead of regular detention. (SH)
- In geometry class, had to build a bridge. (SH)
- Whoever had the strongest bridge won. (SH)
- Creative profile on Facebook or MySpace (DE)
- Science fair for every class. (DE)
- Create something and showcase it on one of the last days of class (DE)
- People in high school are very homogeneous. (DJ)
- Find ways to learn about different cultures. (DJ)
- Encourage human geographies; more aware of one's own culture differs from others. (DJ)
- Bring in different foods, present topics. (DJ)
- Learn more about other cultures. (DJ)
- Simulate sociology experiences; take people out of comfort zone. (DJ)
- Encourage them to take psychology. (DJ)
- Learn how to use their minds and how they work. (DJ)
- Keep an Idea Log; best ideas come when you least expect them. (DJ)
- Give them a voicemail box so they can call during school. (DJ)
- Daily class brainstorm: Question on the board, think of ideas, make paper airplanes with ideas written on them and throw them in an idea box. (DJ)
- Encourage people with different specialties to work together at college level. (DJ)
- Business students and science students can create entrepreneurial idea. (DJ)
- High school course that students create themselves. (DE)
- Produce reading/poem that you like. (DE)
- For college, backpacking across Europe, figure out yourself. (DE)

- High school students go around their state, backpacking, visiting cities and creatively solving problems on their own. (DE)
- Homerooms that have all the grades; freshmen and seniors. (JL)
- College schedule in high school; meet less but more one on one. (JL)
- Each teacher should have a club that they mentor. (JL)
- Extensive field trips. (SH)
- Go the distance to a different cultural region or weekend trip. (SH)
- Exchange program. (SH)
- Problem solving field trip. (SB)
- Have every classroom work on the same project. For example, the could design different parts of a fake car. (SB)
- See how they all clash or get together. (SB)
- Cook your own foods; taco bar, pasta salad. (RS)
- Inspire them. (RS)
- Get young sports person to go around; if he can do it, I can do it. (RS)
- Give people the tools to do things like they, i.e. making websites. (RS)
- Foster them, have them be seen as cool people doing something new and creative. (RS)
- Provide a way for them to sell their own products. Encourage entrepreneurship.
 (RS)
- Give an award for the most creative kid. (RS)
- Share problems in a peer group. (RS)
- Encourage co-ops and job shadows during the school day. (SH)
- Foreign exchange students should go stay with different families for a night, have dinner, teach them their culture. (DE)
- Problems in work and the classroom can relate. (JL)
- Help a nonprofit. (JL)
- Service learning. (DE)
- Mini Olympics. (SN)
- Kickball and other sports between classes. (SN)
- Carving a pumpkin contest. (SN)
- Mini marathon. (RS)
- Encourage high school students to meet a wider range of people. (DC)
- Students in the same school or other schools, college, etc. (DC)
- Make it a competition to know more people. (DC)
- Creative competitions in home economics class; what's the best smoothie recipe. (DE)
- Tech or shop classes; make the most creative cabinet, etc. (DE)
- Corporate sponsorship of different contests. (DJ)
- Building company makes you build a tower. (DJ)
- Schools would be up for it because they are sponsored. (DJ)
- Make the football team and the basketball team play against each other in soccer. (DJ)

- Force teams that don't know anything about a given sport play each other in it.
 (DJ)
- Contest between different sports. (DJ)
- Compete in a creativity contests. (DJ)
- Overseas pen-pals using e-mail or written letters. (DJ)
- Class interactions; woodshop class starts project, sends it to electronic class. (DJ)
- Art class can finish it by making it attractive. (DJ)
- Business class can sell it. (DJ)
- Student/teacher competitions. (SH)
- Dance off or write off or anything off. (JL)
- Have whatever is in the school as a dance off. (JL)
- Design and play your own board game day. (SB)
- Students should learn general skills of developing ideas further like mind mapping. (DE)
- Everyone has an account on brainreactions.net. (DE)
- Learn techniques like SCAMPER. (DE)
- == 4. What would education for creativity be like at the elementary school level?
- Projects where students can develop their own toy; create their idea (DE)
- Create ultimate backpack with things they know in their life. (DE)
- Have days where people are come in and talk to them about how they create things. (DE)
- The different stages in how they are created. (DE)
- Incorporating movement to get energy out. (SH)
- Learn timetables to karate or dance routine. (SH)
- Junior Achievement Program. Same person with occupation came in every week. (SH)
- Create your own game in gym class or on the play ground. (SB)
- More science experiments to show natural phenomenon. (SB)
- More playtime for younger kids; Legos, play dough, sword fights. (DJ)
- Randomly have something in your classroom disappear. Construct a mystery around it, have them solve it. (DJ)
- Have them read mysteries in Lit classes. (DJ)
- Have them make their own choose your adventure books or games. (DJ)
- Tell stories. (DJ)
- $5^{\text{th}}/6^{\text{th}}$ graders create scavenger hunts for $1^{\text{st}}/2^{\text{nd}}$ graders. (DE)
- Engineering class with Legos. (DE)
- Make computer powered Legos in a competition for kids. (SB)
- Themed tables in the room; just drawing or just Legos. (JL)
- Class with drawing or movie software. (JL)
- Kids have free range to do whatever they want. (JL)

- In class, teacher makes kids do physical exercise. (JL)
- Brainstorming with elementary kids. (DE)
- Asking them to create ultimate toys. (DE)
- Paint the same picture over and over again. (DE)
- Paint your family, the ultimate car, the nicest puppy, etc. (DE)
- Paint your family in 20 years or 20 years ago. (SH)
- Have them build a sculpture in the school yard or things like that. (DE)
- Create physical things. (DE)
- Bring them to a brainstorming session. (SH)
- In music class, let them write their own songs or build their own musical instruments. (DJ)
- If you learn about a musical, have them build a scene out of it from Legos. (DJ)
- Let them do something they good at in classes they don't like to keep them interested. Art in math class, storytelling in science class, etc. (DJ)
- Get them involved. (DJ)
- Write their own Madlibs. (DJ)
- Have every class decorate the hallway once a month. (SB)
- Exposing kids to different things. (DE)
- Bring different vehicles in; pick-up trucks, semis, wiener mobile, etc. (DE)
- Stimulate creativity, draw new vehicle from that. (DE)
- Kids decked out in red and white, representing Madison. (?)
- Get really into it. (?)
- Every student is assigned a state, learn about it, etc. (DE)
- Create a parade float. (DE)
- Learn about countries, create a float with an object that represents that country. (DE)
- Create your own country. (SH)
- Ask students to bring something from home that might be interesting to others. (DC)
- Ask students to tell stories or news to the other students once a week. (DC)
- Pick 20 words that all kids knew; each kid had to create a new language; a new word for those words. (DE)
- Each one had their own language. (DE)
- Take kids that are separated by a bunch of years, put them together once a week so they can have a mentor, do whatever they want. (JL)
- Kids are reading a book; take the book and make it into a movie. (JL)
- Take the characters and figure out which actor could play which person. (JL)
- Script for a movie; create the sequel. (DE)
- Create a house; put them in a house and see what happens, if they can function like a normal person. (RS)
- Ethnic Tuesdays, spend time with a foreign exchange family. (RS)
- Ask them how the Google search engine works. (RS)

- Ask them questions that we don't have answers for; "What is the meaning of life?" (RS)
- Ask questions we do know the answer to like "Where did they come from?" (RS)
- Treasure hunts. (RS)
- Christmas lighting competitions. (RS)
- Ask them the meaning of life and compare answers with high school students. (DE)
- Statistics; take the data, analyze it; commonalities among middle school students. (DE)
- How to make a turkey; publish in the newspaper. (DE)
- Create an art gallery; every student submits best picture/painting. (DE)
- People from community can see it. (DE)
- Every kid writes a paragraph of a story, passes it around the classroom one at a time. (SB)
- Add to it. (SB)
- Teachers should be like actors dressed as a different person every day. (DJ)
- Learn about history re-enactment, etc. (DJ)
- Each student has a star/planet. (DJ)
- Make art. (DJ)
- Teach each other about star/planets using art, storytelling and science. (DJ)
- Break things and have students put them back together; challenging. (DJ)
- More pets in the classroom, learn how to care for them. (DJ)
- Teach them how to tell stories. (DJ)
- Mock trials or presidential campaigns. (SH)
- Do whatever you want to get the most votes. (SH)
- Art class; ask them what a new world would look like. (JL)
- Draw the world, people, buildings, etc. (JL)
- Show them one part of a vehicle or something; have them guess where it's from. (DC)
- Allow kids to draw during read aloud. Don't tell them you're collecting them to see if they branch off the stories. See where they go with it. (SN)
- Read half the story, have the kids write the other half. (SB)
- Archeological dig. (SH)
- Put together a fake country, make own artifacts, bury those for the next year. (SH)
- Time capsule; select what to put in it. (DE)
- In 20 years, what do you think kids will put into time capsules?. (DE)
- Draw and identify. (DE)
- Predict the future. (RS)
- Tour Pixar. (RS)
- Have all kinds of resources at the schools. (DE)
- Disney movies, cartoons; stimulate creativity. (DE)
- More chalk for recess; encourage drawing; mural. (DJ)
- Teach kids how to lie. (DJ)



- Huge art area in the school for recess. (DE)
- 5th grade, write letter to themselves; teacher collects them, gives them back at the end of the year. (SN)
- Each class creates a product to sell to other classes; fake currency; business. (?)
- All the kids in the group have a camera; take photos, create slideshow of their world. (DE)
- Teach them origami. (JL)
- Books from the library; blank. Kids can add whatever they want and write back and forth to each other. (JL)
- Get messy. (DE)
- Turn them loose in the kitchen. Create buffet. Everyone creates an entrée. (DE)
- Like Iron Chef, common ingredients. (DE)
- Have that as a lunch for that one week. (?)
- Things they create are for lunch. (?)
- The worst behaved kid in class is the most creative. Pair him up with the smart kid. (DJ)
- Create teams. (DE)

==== 5. What are ideas for products that can be used with schools to help students learn to be more creative? =====

- Laser mirror set. Start at one end of the school, make it hit the target at the other end of the school by focusing mirrors. (SB)
- Have them make an idea generation catalyst. (SB)
- Idea generation catalyst that kids create themselves; part of their desks. (DE)
- Software; post online something you'd like to do; find other people at your school with the same interests. (DJ)
- Store your ideas online. (DJ)
- Wheels with pictures on them; press thing, there's a different picture; like binoculars. (DJ)
- Blank ones; let students make their own stories. (DJ)
- Share them. (DJ)
- Product like Legos; combines visual elements. (DE)
- Put pictures on the sides; create things based on that. (DE)
- School Wikipedia. (RS)
- Internal Wikipedia; add what they think about the world. (RS)
- Molding stuff; clay, etc. (RS)
- Creativity basket; play-dough, Legos, assortment of those things. (DE)
- Sticks with magnets on the end, build a small house in the classroom. (SB)
- Fortune cookie; what's going to happen? Think about the future. (RS)
- Fortune cookies that they create themselves, insert fortunes or ideas in cookies.
 (DE)
- Capes to paint with; design own smock. (DE)

- Computer program that generates 5 different words for them. A name, a place, a scenario; they have to write a story about it. (SB)
- Colored magnets, arrange them into a picture. (SB)
- Idea line, small dry erase boards; take them off, but them back on the line. (SB)
- Dry erase board desk. (SB)
- Color on it. (SB)
- Lego set; photo mosaic, build it out of Legos. (SB)
- Give them the print for it. (SB)
- Magic 8 ball; gives them a word that they should create a painting of. (DE)
- Make your own storybook kit. (SN)
- Idea man at school with the cape. (DJ)
- Sticky ball; throw it at the ceiling in classrooms. (DJ)
- Play creativity games. Ask "Name an animal that starts with this letter". The last person who can think of a unique one becomes the idea king for the day. (DJ)
- Sell voicemail storage for students to call themselves, store ideas. (DJ)
- Cafeteria trays should have puzzles on them. (DJ)
- Kids like to be rewarded with stickers. (DE)
- Yellow light bulb stickers. (DE)
- Write an idea on the light bulb. (DE)
- Something more than that as well. (DE)
- Foreign sports; sold at kid level. Cricket for example. (SN)
- Cricket bats for kids. (SN)
- Kids like candy. (JL)
- Name that candy day. (JL)
- Take all these ideas; create a candy from one of those ideas. (JL)
- Notebooks with different shapes. (JL)
- Small screen with random words on it. (JL)
- Textile creation product; make outfits for pets in the classroom. (DE)
- Hamster wraps. (DE)
- Creepy crawler molds; make your own molds. (SH)
- Odd shaped chairs, like a piece of pie or a spider. (SB)
- The desk is in the chair; write something on it; erase it; write again. (DC)
- New ways to grab things; weird arm. (RS)
- Make your own stickers. (RS)
- Web applications where students can create these basic things. (DE)
- Here's my sticker design; print it on sticky paper. (DE)
- Kids like fire. Make a class science project out of which group can put out a fire the best? (DJ)
- Discuss why; experiment. (DJ)
- Class projects that take entire semesters. (DJ)
- Put together by little companies. (DJ)
- Construction Kits: Put together this clock or something equally hard to do. (DJ)
- Instead of freeze tag; think of 5 ideas before they can run free again. (DJ)



- Clothesline in the classroom; hang paintings, stickers, etc. (DE)
- Everyone has to make their own super hero costume. (SB)
- Bouncy ball; say a word into it; remember all the words; bounce it, it will say the word. (JL)
- Day where the kids create a new sport and the equipment that goes with it. (JL)
- Class trading cards, super heroes for the class. (SN)
- Give everyone a nickname in the classroom. (SB)
- Have a bunch of different kits for building things like slingshot. (SH)
- Pen; press a button, flashes a random word. (SB)
- Drawing tablet, draw on it. (JL)
- Button on the corner, "send," post it on the school website. (JL)
- Physical MySpace or Facebook profile. (DE)
- Graphically represent what they like with objects. (DE)
- Facebook party; make your own shirt. (SB)
- Everyone at the school gets into pairs, have own companies, make a stock market. (DJ)
- Create a Guess Who type game, or Clue. (DJ)
- Find out who the murderer is. (DJ)
- Who took the cookie from the cookie jar. (DJ)
- Entrepreneurship kit for elementary/middle school. (DE)
- Teach them about business. (DE)
- Everyone has currency; buy what they want, what they think is the best business. (DE)
- Musical instruments. (RS)
- Give them their own. (RS)
- Kites to create musical instruments. (DE)
- Monopoly game; blank money, create their own. (RS)
- Keyboard with only emoticons. (RS)
- Design blank monopoly. (DC)
- All the cards are blank; redesign the game. (DC)
- Model cars; create own car with different parts, combinations. (DE)
- Blank keyboard in general, teach typing. (SB)
- Create own dictionary kit. (DE)
- Take all the words they've created and create a dictionary with definitions. (DE)
- Live Oregon Trail. (SN)
- Answer questions right, get money, prizes, etc. (SN)
- Outfits for different stories or Oregon Trail so they can do actual re-enactments. (DE)
- Calk the wagon at the local pond. (DE)
- Have elementary school kids pair with high school students who know computer programming. Make a program that's useful to the kids; keep track of their Pogs or whatever they play with these days. (DJ)
- "Where's George" stamps on the 1 dollar bills. Do something like that. (SB)

BrainReacti@ns

- Put something on a cardboard box, track wherever the cardboard box goes. (SB)
- Bumper stickers; create their own. (RS)

==== 6. How could the web be used with creativity education? =====

- Facilitate all the ideas, combine them. (SH)
- A classroom in the states makes the first part of the car, send it to a school in Asia where they make the next part. (SH)
- Elementary school students outsource ideas to students in other countries. (DE)
- Online creativity presentation. (DC)
- Storage spaces for students to store/develop ideas. (DE)
- Encourage high school students to use it. (DJ)
- Number to call; own account; say stuff, translate it to text onto your blog or facebook profile. (DJ)
- Tutorials on YouTube on learning creative skills and projects. (DE)
- Clearing houses online for schools to connect, hear the activities we're doing to foster creativity. (DE)
- Respond to someone's video on YouTube. (?)
- Make a Goldberg device; step by step; toaster pops, something flips over, etc. Show people around the world. (DJ)
- Get shown up by someone else. (DJ)
- Have one classroom be connected by video conference to others. Have them direct a play that way. (SB)
- Invitation website. (SH)
- Say there's an open house, come for tours on this day. (SH)
- Candle maker says you can be my apprentice for a day, etc. (SH)
- Flickr for kids paintings. (DE)
- Take a picture every day; stop and go motion type video. (RS)
- Fiveminutes.com has every how-to video. (RS)
- Peeko.com make any physical product, it will do it for you. (RS)
- Moser.com takes all these pictures, makes a collage into a giant picture. (RS)
- Social networking site, knit anything you want, sell it on their. (RS)
- Website where you create first page of story, people add to it; launched one book. (RS)
- Wikipedia. (RS)
- Build your own store. (RS)
- MySpace, build your own site. (RS)
- One person makes one layer of a song, send it across the world, keep sending it and it becomes a song. (SN)
- Splicemusic.com. (RS)
- Student music. (JL)
- Go out, write stories. (JL)
- Send them to this site, post it as your own story. (JL)

- Play a game of telephone over instant messenger. Use it for brainstorming; passing along an idea. See how it evolves. (DJ)
- Who has it at school, what the sentence has become. (DJ)
- Kid's questions. "Meaning of life, etc." Analyze it, find the themes from kids; how do kids think in different parts of the world. (DE)
- Teach them how to collaborate. (SB)
- Put them in a room in school, share answers on tests through instant messaging only. (SB)
- Future capsule; put stuff on their, show you what people have seen 10 years ago. (RS)
- Build your own ice cream flavor on a website. (RS)
- Tool that integrates all these websites we're talking about as a resource packet for students. (DE)
- Teachers can say, do this assignment, build your own ice cream, create your own collage, etc.. (DE)
- Integrated into curriculum. (DE)
- Google tools. A list of software you need when you get a computer, download all of it because you'll want it. What if there were a list of free tools for brainstorming? (DJ)
- Brainstorming tool. (DJ)
- Download from a website; all free stuff. (DJ)
- Whole system on your computer. (DJ)
- Create a page that can control maps of networks. See how people are connected to other people. (DC)
- Game where you can drag balls and other objects. Press play, ball falls, bounces off trampoline, and responds to realistic physics. Great way to teach cause and effect relationships. (SB)
- Creativity icons; look at a city, see what kind of artwork they're doing. (DJ)
- On Google Earth, have marker icons for creative school projects. Working on the same projects at all different schools. Art, music, etc. Find other schools on Google Earth. (DJ)
- See what people come up with. (DJ)
- Webcams in different schools' classrooms. (SB)
- Art classroom; if you are stuck on an idea, see what another person is doing. (SB)

==== 7. If you were to create a new school, program, or class dedicated to enhancing creativity, what could you call it? ====

What You're Thinkin' Program (DJ) We Already Thought of That School (DJ) I Think You Can School (DJ) For different parts of the country, different themes (DJ) Brain Dust Storm (DJ)

Brain Blizzard (DJ) Brain Typhoon (DJ) Brainsters (SB) The Idea Factory (SB) Smart Start (SB) Little People, Big Ideas (SB) Genius Land (SB) Mindstretch (SH) Mindflex (SH) Certified Idea Generator (DC) Professional Idea Generator (DC) Professional Idea Manager (DC) Stronger Idea Generator (DC) Idea Generator Institute, IGI (DC) The Idea (JL) The Place to Relax Your Brain and Then Throw It Around (JL) Zip, Zap, Zot (JL) The Creative Zone (JL) My Mom Says I'm Creative (RS) The Create-asaurus (RS) Zaparooni (SN) Bubblefresh (SN) Anapalooza (SN) Creat-Ed (DE) Think It (DE) Invent (DE) Involve (DE) Open Up (DE) Big Mind (DE) Outside the Box (?) Outside the Book (?) Ideation Destination (DJ) Creation Destination (DJ)

BrainReacti@ns

After the Storm: Individual Brainstormer Analysis

This is the brainstormers' own summary, analysis, and synthesis just after we finish the brainstorm.

=== 1. What would education for creativity be like at the <u>college</u> level? What would students do or be exposed to? ===

-(MG): More creative thinking in the classroom, i.e. not everything has one answer, learning from experience rather than textbooks, field work, working hands on, one-on-one, with diverse groups of people. Group work that does not involve projects but rather the sharing of ideas. Less structured, more going with the flow of the class, what they want to learn more about. Involve movement, games, etc. Graded on creativity, effort, rather than tests/papers

-(SH): Everybody's art project-everyone adds to a piece on campus. Gen eds at the end of education $(3^{rd}/4^{th} \text{ year})$. Committees/competitions/courses to solve local problems. Creativity classes. A person with special knowledge can teach 1 credit course.

-(DC): Alumni resource used in classes. Real problem/case study for college. Creativity tool kit at the beginning. Email calling for diverse solutions of a problem. Study abroad program.

-(SN): College students should get more involved in diversified surroundings such as the place the student in a surrounding in which they had the wrong assumption about (in the land of poverty, church, explore different states, terrain, cultures).

-(SB): Real world problems-either give them current problems local businesses/community are having and have them come up with ideas-maybe not even work on a solution but create a list of top 10 approaches. Have alumni come in and present a problem they recently solved at work, and ask students to come up with ideas and then tell them what they did.

-(JL): It would be a place and not a place: Classes, rooms, a physical place and then that same zone, but on the internet as a second complimentary platform. Students would post and collaborate on idea generation and implementation.

-(DJ): Department game rooms to unwind, creativity Olympics, murals, idea white boards and kiosks, class in different rooms. Class outside, class competitions, idea blogs.

-(RS): 1. Give them a problem. 2. Figure out a solution to the problem. 3. Trial and error to get an answer. More idea generation sessions

=== 2. What would education for creativity be like at the middle or <u>high</u> school level?

-(MG): Hands on, movement based. Less tests, more interactive learning, seeing how they apply what they have learned to the real world. Ask questions. Make sure they know not every question has an answer, or can have multiple answers. Incorporate art, music, dance, etc.



-(SH): Student exchange programs (locally). Have foreign exchange student have dinner at a bunch of different family houses. Take a product and do more with it than you're supposed to. (Rocket goes 20 feet higher than it should) Build own classroom for the semester. Make your own food at lunch.

-(DC): Social network building challenge. Story writing. Study somewhere else program. Different sports teams play together for different sports.

-(SN): High schoolers should write, direct, film short videos and have middle schoolers act in them. Perhaps middle schoolers could assist and learn from the production side of making a movie. It could be a music video of lipsyncing like "Numa, Numa." In the end put it on YouTube.

-(SB): Competitions between grades would be good. Give them a set of materials and see who can build the biggest tower. I liked the idea of having the shop class build the frame for something designed by the math class, then pass it to the art class to make it look good.

-(JL): Creativity would make itself present in competitions and group creativity sessions. Ideas would be passed around from class to class, group to group.

-(DJ): Idea generating games (like mystery solving), interactive projects between different classes, hallway decorating, sports competition. Encourage ideas notebooks and sharing.

-(RS): Figure out solutions to problems

=== 3. What would education for creativity be like at the <u>elementary</u> school level? === -(MG): Movement, artwork, dance. Experiments, asking questions. Using your hands (clay, play-dough, water, sand, anything sensory and fun). Problem solving through hands-on projects. More field trips and less books.

-(SH): Hands on, lots of resources, creativity boxes. Cultural speakers. Ethnic days. Write choose your own ending/adventure books. Older kids make scavenger hung for younger kids.

-(DC): Encourage students to invent new words (language) for existing words. Music generating software easy to use for kids. Encourage students to bring something unusual to others from home.

-(SN): Elementary kids are really nice and should mentor high school kids. High schoolers tend to forget their surroundings and elementary kids love interacting with their surroundings.

-(SB): Pass around a story for everyone to write. Create own meals. Give a kid a rough storyline and have them write a story. Dismantling something complicated and trying to get them to put it together again. Bring in something random like a clutch and explain it.

-(JL): Play art, writing, drawing. The basics of ideas and alternative thinking. "Different class work" in every sense of the word.

-(DJ): Blocks, legos, clay, play time, make-your-own food, song, musical instrument, science project, play, encourage storytelling and writing.

-(RS): Inspire students to be creative so they know that it's a good thing. Show them tools to be creative. Tools, photoshop, web page builders, etc.



=== 4. What are ideas for products that can be used with schools to help students learn to be more creative? ===

-(MG): Regular products like crayons, markers, paint and paper, clay, play-dough, etc. Opportunities more than products. Having access to a wide variety of mediums. Disposable or reusable cameras for the classroom, take turns using them to capture what your world.

-(SH): Software, websites, forums. Kits. Themed tables ("clay table," "wood working table). Own games/music (songs/instruments) plan gym class.

-(DC): Desk and other furniture which are easy to write on and erase. Idea collecting can. Blank monopoly which can be redesigned. Music writing software for students.

-(SN): Talking toaster for kids that would help them crunch numbers in the morning as it made their toast.

-(SB): Large building supplies. Navigate a laser beam through a building using mirrors. -(JL): Pass around, blank library book for each class and each year.

-(DJ): Things you can build and optimize (towers, bridges, electronics, music), idea food trays. Have young and old pair up to design software. Train pets.

-(RS): Drawing new ideas, clay, legos

=== 5. How could the web be used with creativity education? ===

-(MG): Websites that let you create things on your own like putting together a person with this type of hair, this type of clothing, etc. Websites that involve coloring. Have online assignments that pertain to real life. Ways to upload creative pictures, share with the class.

-(SH): Online forums. Write parts of stories. YouTube tutorials.

-(DC): Webcast for schools from different country. Online creativity competition. Cooperation on a project by students across the world.

-(SN): People all across the world should do a "show and tell" online (perhaps someone in China tells what they did online to someone in Sweden). Virtual penpals you can call it. Instead of chain mail make chain videos.

-(SB): Sharing art or stories across schools. Maybe have 2 classes in different schools write a story and then exchange stories.

-(JL): A forum for thought, a place to post and discuss ideas. Schools could match up with international schools to talk and learn.

-(DJ): Google earth to compare art at different schools, idea blogs, idea "virus" on instant messager (pass it along, watch it spread), use "build your own" sites.

-(RS): Glypho.com, YouTube.com, Webpage builders

=== 6. If you were to create a school, program, or class dedicated to enhancing creativity, what could you call it? ===

-(MG): Let's Create. Kreative Kids

-(SH): Idea expo. Bulb.

-(DC): Idea Generation. Open Mind. Big Picture.



-(SN): C.R.E.A.T.E. (Create, recite, elaborate, adapt, transform, execute) -(SB): Braintime, Idea Factory, Brainsters

-(JL): The Idea Bog. Idea Swamp. Quicksand Ideas.

-(DJ): Destination Innovation. Creation/Ideation/Idea Village.

-(RS): My Mom says I'm creative.

What themes did you observe amongst ideas from this brainstorm? What did multiple ideas have in common?

-(MG): Uploading thoughts in voicemail or online to check later. Diversity.Travel. Learning about different cultures. Incorporating movement and art with learning

-(SH): Multicultural influences/foreign languages. Work away from your normal site. Competitions/rewards.

-(DC): Ideas are around related questions.

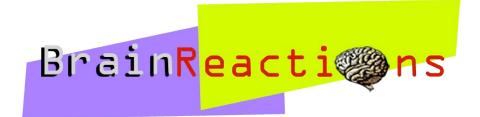
-(SN): People were able to create ideas based off of personal influence.

-(SB): Often apply existing ideas to new areas, many ideas today were focused on the arts.

-(JL): Hands-on action moved to brain-extended thinking.

-(DJ): Story telling, comparing and sharing between schools. Working with people overseas, pictures, competitions.

-(RS): More idea generation sessions



Idea List & After the Storm Synthesis into Themes

The themes were developed from synthesizing the idea list, top selected ideas, and "after the storm " brainstormer summaries.

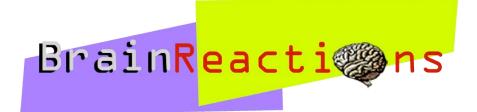
****At the College Level: Diversity of Ideas.**** To foster creative learning at the college level, take advantage of the wide diversity of knowledge and perspectives inherent in the student body. Have students collaborate with people that have a different expertise both within the college community and beyond. Promote design or creativity competitions (such as an Olympics of creativity-focused events) between groups of students from different backgrounds (academic, geographic, etc.) to see the breadth of ideas produced.

****At the College Level: Revolutionize the Classroom.**** To foster creative learning at the college level, promote problem solving and open ended projects as opposed to textbook learning and rote memorization. Hold class in different learning spaces as opposed to just one classroom. Use the classroom to solve real problem affecting the local community.

****At the Middle/High School Level: Promote Competition.**** To foster creativity at the middle and high school level, promote intra- and inter-class competitions. Take advantage of inter-class rivalry (for example, during homecoming week) to promote creativity learning events such as hallway decorating, design competitions and sporting events. The same can be done if students of the same age are divided into subgroups such as homerooms, pods, classes, etc. Design competitions can be sponsored by local businesses.

****At the Middle/High School Level: Allow Room for Collaboration.**** To foster creativity at the middle and high school level, promote collaboration between middle and high school students or among students taking different classes. For example math and science students could design products which would be built by shop students and decorated by art students. Language and business students could collaborate to create advertising for the products. The same concept could be used to promote interaction between middle and high school students.

****At the Elementary School Level: Storytelling.**** To foster creativity at the elementary school level, teach them how to tell stories to one another. Teaching storytelling takes advantage of a number of creative techniques and can incorporate a number of skills depending on the grade level of the student. For example, younger students could be spared from writing but asked to use props and other students to portray the events of a story. Older students would make greater use of reading and writing techniques. Art class could also be incorporated into the storytelling theme.



****At the Elementary School Level: Interaction through Hands-on Learning.**** To foster creativity at the elementary school level, take advantage of their natural desire to play and interact. Have groups of students build things, take things apart, create music, make a snack or design a science experiment. Incorporate acting, directing and dance into reading lesson. Have them collect items on field trips to bring back to class and work with (i.e. samples from a factory or leaves from a forest).

****The Wired Classroom.**** Take full advantage of available computers to help students learn and be more creative. Digital cameras can be used regularly for a number of purposes like storytelling and cataloging intellectual growth. Develop software that makes more difficult activities like bridge design, movie directing and music generation more accessible to the students.

****Compare and Contrast.**** Use the web to share and compare ideas from all around the world. Google Earth could become a tool for both physical and cultural geography by letting students worldwide post their artwork, written stories, plays and music. Classrooms could interact directly with one another too. For example, shared lectures could be held where one teacher teaches both local students and students on the internet. Students could interact directly by having virtual show-and-tell or by collaborating to complete a task that they cannot complete alone.

****Naming.**** The word "create" was the focus of many of the suggested creativity program names. Popular suggestions included "Let's Create", "Creation Destination", "Creation Village" and "My Mom Says I'm Creative".

****Analyst's Reflection.**** Many of the themes and most viable ideas involved competing and interacting with people locally and globally. In our experience, students learn creativity when placed in unfamiliar circumstances with people they do not know well. Every new task, new experience and new friendship turns something unfamiliar into something familiar, thus increasing a student's breadth of knowledge. This creates a better foundation for creative thinking.