

Tips for successfully completing the Minnesota Future City Competition

Submitted by teachers who participated in the program for the first time during the 2008-2009 school year.

From: Nathan Naef, Chaska Middle School East

I participated in the Future City Competition for the first time in 2009. I was blessed with lots of great help in the beginning from my predecessor and support from my school was already established. However, perhaps I can offer some tips of how I was able to take over the program and finish with two teams in the top 10 at the Minnesota Regional Competition.

1. Establish a basic timeline (from September – February) for when to accomplish all of the tasks necessary to do well in the competition.
2. Advertise the program to the students in your school who have a knack for engineering, creativity, and hard work. Talk with the gifted and talented educator in your school. I recruited eighth graders from my own gifted education classes. I started with about 20 students.
3. Build relationships from the beginning; have team-building meetings first, if needed.
4. I did not establish teams right away. I found it beneficial to watch the students interact with each other through the first two steps (computer city and essay/abstract) before choosing team captains. Students began working together in two groups on their own as time went on.
5. Give an overview of the entire competition to your recruited students at the first meeting so they understand the entire scope of the competition.
6. Identify the strengths of the participants. I simply wrote titles on several sheets of paper (i.e. “good speaker,” “good writer,” “enjoy researching,” “creative,” “good with computers,” “enjoy art,” “enjoy working with my hands,” “problem solver,” etc.) and had students put their names on small post-it notes and stick them on their strengths. These came in handy later when I was looking for students to write or research the essay, build the models, and help solve disputes.
7. Be mindful of deadlines and have a back-up plan! I almost missed emailing the abstract and essay because I was absent from school that day and didn’t get them submitted until 11:40 pm on the due date.
8. I met after school with my students for at least 2 hours per week. This time greatly increased in January as deadlines came quickly.
9. Begin “dumpster diving” and planning for the 3D model within a month or two of beginning the competition meetings (by October or November). Finding materials that were appropriate and useful was the hardest part – especially finding a base upon which to build! We spent very little money on materials. Our biggest expense was paint.
10. Computer City: Begin with multiple computer cities and find a way to narrow down to the 2 cities that best fit the rubric. Save back-up copies of your cities! We had a setback when after several weeks of “getting the hang of it,” the server at the school was reset and we had to start over.
11. Essay/Abstract: Revise, revise, revise! Ask a lot of questions to your students. Researching and then writing an outline first really helps organize the information. I encouraged “writing too much” (1000 words) and then cutting back to 700. Make sure

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aspects of the essay and computer city are found in the 3D model. One of our essays got a deduction for missing a bibliography.

12. I found that my students generally grouped themselves around the two emerging cities. Groups of friends began working together based upon who worked on each essay and computer city. Students were working on the 3D models for a couple of weeks into January before the mentor and I announced team captains. It was hard to choose only 5 students per team when I had approximately 15 students come to each meeting/practice. I stressed over and over again to the students that were not “chosen” that everyone’s contributions will determine the final placement of the team(s), but only 5 can “represent” the team at the competition. In the end, my students understood that how they worked and progressed up to that point determined who the captains would be. Everyone was extremely supportive even if they weren’t one of the “5”.
13. The oral presentation should be written in conjunction with the building of the 3D model. The captains delegated (after they were chosen) who would work on the oral presentation and who would build the model.
14. Practice the oral presentation! Ours could have been much better if we had more time to practice. The now established groups practiced bits and pieces of it together, but I think each of my teams only had two formal rehearsals in front of me, the mentor, and the group. They did a lot of rehearsal individually.
15. Make sure that any other students who helped your teams get recognized at your school. Since only 5 get formally recognized at the competition, make sure you have announcements or another method to recognize everyone else’s efforts. We displayed our two cities in the media center.
16. Probably the most important thing you can do is communicate with the parents! I needed vans to get materials to the competition and people to bring extra glue guns, glue sticks, markers, etc. to St. Thomas in case things would arrive broken. Make sure any parents bringing the model show up early and know exactly how to get there. I had one city model show up at 8:30 – just after the first set of judges came in to hear the oral presentation.
17. Finally, I made sure it was fun. Two hour meetings get really long, so we had a lot of laughter, food, music, etc. at our meetings. I showed the agenda for the meeting right away on the projector, reminded them of due dates, and made sure students knew what to do and who was doing it at the beginning of each meeting. Then I set them loose.

From: Rick Larson, Discovery Middle School, Alexandria

1. Any project is a good one as it is a learning year and the judges were all great to the very nervous presenters.
2. Make sure to allow enough time to complete the virtual city on the software.(especially if the students or teachers have never played the game before).
3. Don’t be afraid to email or call the FCC coordinator with questions.

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From: John Oman, Shakopee Middle School

- Read the manual more thoroughly ☺
- Go to the orientation
- Have students use the same city name on all facets of the project
- Plan out our calendar
 - Meet twice a week
 - First meeting is an overview of the whole project with pictures, videos, etc.
 - City Engineer comes to speak to discuss the elements of planning a city – zones, infrastructure, etc. Students learn the concept of city design.
 - Set up field trips related to the research study.

 - SimCity – All students
 - Before starting on SIM, groups make an outline of what they think the SIM city should look like.
 - Tutorial on using SIM software showing how the SIM model relates to the concepts of city planning and design
 - Buy more SIM city software.

 - Research Essay – All students
 - Partners research the topic, go on field trips, study the research rubric and write a research essay.

 - Abstract – All students
 - Partners will brainstorm the futuristic features of the model city. They will include features from the research topic and the zones/infrastructure items from the SimCity.

 - Oral Presentation
 - Identify presenters earlier
 - Write out presentation using the rubric
 - Create 1 or 2 visuals based on presentation
 - Practice in front of team
 - Coaches ask questions of the teams that judges may ask:
 - What are your plans should a natural disaster occur?
 - Tell me about the city's infrastructure.
 - Why do people want to live in your city?
 - What engineering principles did you use?
 - See manual for more ideas

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From: JoAnn Trygestad, Rosemount Middle School

- The handbook is overwhelming for first-year participants, but look at the summary sheets and score sheets which provide the basic information you need and the due dates.
- Check the website for photos of the models to get a feel for the projects; that's also motivating for the students.
- Let students be random and creative! Some will want to work more or harder on certain components of the Future City project.
- Not all students will be at every session. Flexibility is the key to having a wonderful time because students need time away as well. Plus, treats help!
- Take advantage of your engineer mentor, who provides valuable guidance.
- Give students a "home" or special place to meet and store their materials. An announcement area and recognition of their progress (as on a bulletin board) is a great idea.
- Be consistent and regular with when and where you meet.
- Students need to see progress on each step.
- Sometimes the students who participate are not the students you might label "gifted/talented." Be sure to have the contest available for all your students.
- The Future City Project offers multiple layers that appeal to different students, so encourage all students to participate.
- Enjoy! Have a wonderful time with the process!