

Goal Cards: Achievement for Extended Learning Students

~ by Leone Junck

What is Future Problem Solving?

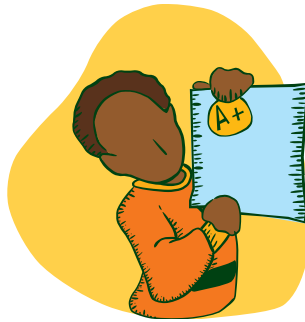
Future Problem Solving is a six step process to solve futuristic problems. This process also works for current problems. The students research a topic and apply the six steps in order to reach a solution to a problem.

The steps begin after reading the future scene:

1. identify possible challenges
2. write an underlying problem
3. create and write sixteen solutions to the underlying problem using as many of the twenty categories as possible
4. write criteria questions to determine the ten best solutions
5. rank order the ten best solutions by applying the criteria questions
6. write the action plan so the best solution can be activated

The students work in teams of three or four. They learn to be comfortable sharing their ideas. As time progresses they develop skills to become more effective team players.

Students research four topics during the school year. The first



and second competitions are held at the school: the packets are sent to state evaluators and returned to the students with their scores and useful feedback on how to improve. The third competition is an Area Education Agency Bowl held at a central location. Again packets are scored and feedback sent to the students. The fourth is the State Bowl with winners from the AEA Bowl attending. From the State Bowl, teams are selected for International Competition. First and second place rankings are invited to State Competition, along with several At Large Teams, who were also high scorers. A fifth topic is researched by teams going to International Competition.

The format for the AEA Bowl and State Contest are the same. Each team is in a separate room with a monitor they don't know. The monitor will not give advice on the topic or feedback about how or how not to work. During the two-hour contest the students need to complete all parts of the six steps. In order to do this they need to stay focused and keep on task. The monitor will not tell them to get busy. They may have a dictionary and thesaurus to use.

Background

Eight of the past eleven years, students have qualified for the State Bowl. The AEA our school is in has steep competition. There are usually fifteen to twenty teams in a division. Students in eighth grade have surpassed the ninth graders, who usually have had more experience. The junior division has 4th, 5th and 6th graders. The intermediate division has 7th, 8th and 9th graders. The senior division has the 10th, 11th and 12th graders.

In the 2005-2006 year three teams were invited to the State Bowl. In the 2004-2005 year, two teams attended. In the 2003-2004 school year, three teams attended. In the 2003-2004 year three teams attended. In the year 2001-2002 two teams attended, and in each of the other years one team attended.

All teams going to the State Bowl had to be prepared. They needed to have read the research. The topic had been discussed in detail in class. They talked about possible challenges from the readings. Many viewpoints were brought to attention. Students knew how to follow the six steps. The details of the steps had been learned. Students practiced writing each step, checking for the requirements. Students knew the categories for which they were responsible. Using more categories resulted in more points, both in possible challenges and solutions.

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Team work skills were refined. At the end of class they self-checked their team work behaviors. The traits to monitor were determined by the students.

Student written goal cards

Before the AEA Contest and the State Bowl, students wrote individual goal cards. Each student determined his/her own goal and the steps necessary to achieve the goal. Two goals were needed for individual work and two for team work. Each goal required two steps in order to achieve that goal. Writing those steps allowed the student time to determine how the goal could be completed.

Student written goals follow:

Individual Goal: Do my part
Steps: keep focused, listen to each other

Individual Goal: Stay on task
Steps: look only at the packet, mentally clear out other noises

Individual Goal: Listen
Steps: listen to team members, consider what they say

Individual Goal: Use categories
Steps: study categories ahead of time, study category job title

Individual Goal: Help keep myself and others on task

Steps: if someone is stuck help them so they don't get sidetracked; do my part

Teamwork Goal: Stay away from arguments
Steps: work together, if someone has an idea, listen

Teamwork Goal: Finish packet
Steps: no unnecessary side comments; help each other when stuck

Teamwork Goal: Do not goof with teammates
Steps: stay on task; think of only what we are doing

Teamwork Goal: Stay on task
Steps: read future scene before starting; go back and check work

Students responded to their own goal cards after the contest during the next class session. Student written reflection:

"I found it quite fun to use all of my job descriptors. It helped me to get done faster, too. That way I could help other team members do their solutions. After every solution or possible challenge I read my idea to the group and then they read theirs aloud. It helped us not to have duplicates."

By responding to their own goal cards they had time to reflect on their progress. This helped them in the next contest as they could

learn from what worked and what needed improving.

I wrote feedback to the students based on their goals and their comments. These were sent home allowing the parents to give feedback to their student.

Research Method

Goal card use was evaluated using the following survey:

Evaluation of goal setting shows many levels of growth. Please indicate on the grid the response to each question. Let 5 represent the highest score, while 1 is the lowest.

Grid for questions 1, 2, 5, and 6:

- a. before February 1, 2006
1__2__3__4__5__
- b. after April 1, 2006
1__2__3__4__5__

Grid for questions 3, 4, and 7:

1__2__3__4__5__

Students wrote the following comments about how goal cards have helped them:

- "I think the goal writing helps you keep focused and on task during both the AEA Contest and the State Contest."
- "For the State Contest, the difficulty of the task increased which required more focus, so I had to refer to the goal cards."

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- “I think goal cards help me to reach my goal. It gives me tips and reminds me when I got off track. The cards are a good idea.”
- “The goal cards helped me do my share and finish the packet.”
- “The goal cards help because you know what you need to do and how to do it.”
- “The goal cards helped me communicate with my partners more.”
- “The goal cards help keep me calm, lower stress, and not get stuck. They are not always easy to remember, but when you try, they help you focus.”

Results

This past year six teams attended the AEA Bowl. This was the first year all teams attending ranked at the Bowl. Before the students entered the school, uninterrupted silence was held as the students read and focused on their own goals and the steps to achieve these goals. Then the goal cards were gathered. They did not have them during the contest.

From the data on the survey, the goal cards aided them in their two hour writing competition. During the two hour process, no help was given in any way. They were not given reminders about what needed to be in the steps or to keep working. They had to activate their own skills and work ethics.

Goal Card Use - 8th Grade	
Student survey	Percentage of increase
Growth in understanding how to write a teamwork and individual goal	33%
Growth in understanding the value of writing goals for yourself	17%
Level of help your individual and team work goals gave you at AEA contest	77%
Level of help your individual and team work goals gave you at State contest	80%
Growth in your ability to communicate with your team members	34%
Growth in your ability to be an effective team player	24%
Rate at seeing yourself writing your own goals	57%
<i>Six students participated in the eighth grade class.</i>	

Goal Card Use - 7th Grade	
Student survey	Percentage of increase
Growth in understanding how to write a teamwork and individual goal	35%
Growth in understanding the value of writing goals for yourself	38%
Level of help your individual and team work goals gave you at AEA contest	74%
Level of help your individual and team work goals gave you at State contest	60%
Growth in your ability to communicate with your team members	33%
Growth in your ability to be an effective team player	31%
Rate at seeing yourself writing your own goals	58%
<i>Eleven students participated in the seventh grade class.</i>	

From the six team ranking, three went on to State Competition. They did not place at the State Competition.

During other years, student surveys were not given. However, judging from their success, the goal cards helped them.

Students benefit from writing their reflections on their own progress. It gives them the opportunity to evaluate what

worked and how to improve. It gives them a boost in being responsible for themselves.

Conclusions

Student-authored goal cards assist students’ achievement. This is only one technique, but when incorporated with many of the others, gives students a learning advantage. Over fifty percent of the students are likely to use this strategy on their own in other

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Goal Card Use - 6th Grade	
Student survey	Percentage of increase
Growth in understanding how to write a teamwork and individual goal	30%
Growth in understanding the value of writing goals for yourself	30%
Level of help your individual and team work goals gave you at AEA contest	85%
Level of help your individual and team work goals gave you at State contest	NA
Growth in your ability to communicate with your team members	35%
Growth in your ability to be an effective team player	30%
Rate at seeing yourself writing your own goals	70%
<p><i>Four students participated in the sixth grade class.</i> <i>NA=not applicable The sixth grade team did not qualify for state competition.</i></p>	

classes. This broadens their success in other classes.

Students have learned a technique they can apply to other situations, and they become responsible for

their own lifelong learning. This strategy is a positive way for students to maintain their motivation and be responsible for their achievements.

Leone Junck was awarded the 2006 State Excellence in Education Award from the Alpha Delta Kappa International Sorority of Women Educators. She has coached Future Problem Solving for fourteen years. For the past six years she has served as a State Future Problem Solving Evaluator. She received the Iowa Talented and Gifted Association 2003 Research Award. For the past seventeen years she was the Extended Learning Teacher and Coordinator, grades K-8, for the Ogden School. Prior to that she taught second grade. Currently she serves as president of the Elm Street Preschool. This is her first year of retirement after thirty-one years as an educator. She may be reached at dlsj@netxins.net.