

## **Problem Solving Through Future Forecasting**

Linda Murphy, DSL  
Defense Contract Management Agency  
Huntsville AL

**This is a partial preview. For full access to these teaching materials, please register and download.**

<b>Rationale</b>	The tools presented are to help each student become better prepared to solve problems with scenario planning.
<b>Purpose, learning objectives, outcomes</b>	<p><b>Outcomes</b></p> <ul style="list-style-type: none"> <li>At the end of this unit students will be able to focus on an issue and explore various options available and the potential for effective decision-making using future forecasting.</li> </ul> <p><b>Learning objectives</b></p> <ul style="list-style-type: none"> <li>This unit can help to satisfy accreditation or other curricular requirements for course content that addresses such needs as: the impact of technology on society; the impact of culture changes on society; accountability for choices; developing verbal communication skills, value of teaming, and developing presentation skills.</li> </ul>
<b>Foresight/Futures Studies Skills, Methods, Techniques</b>	Scenarios, environmental scanning, GBN/ 2x2 matrix/deductive scenario construction, Futures wheels, future indicators.
<b>Learning Environment</b>	<p><b>Classroom</b></p> <p>Contact time: nominally 150 contact minutes (e.g. three 50-minute class sessions or two 75-minute class sessions) a week.</p> <p><b>Individual and group</b></p> <p>This unit involves group work in and out of class, and individual homework outside of class.</p>
<b>Time</b>	<b>6 weeks</b>

## Background/Preparation

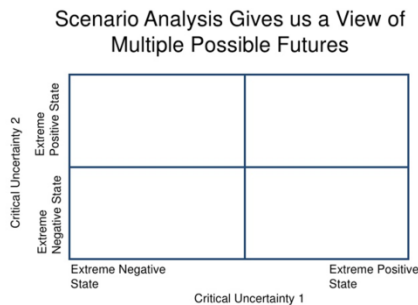
- Assigned reading before the unit starts, in which the students learn the foresight methodology and its benefits to the process: Hines, A. and Bishop, P. Framework foresight: Exploring futures the Houston way. Futures 51 (2013) 31–49.  
doi:10.1016/j.futures.2013.05.002
- Student preparation time: Nominally, at a rate of 2 hours of work outside of class per contact hour, there would be about five hours of student work outside of class for this project unit.

## References to assist instructors

**Defining a problem:** <https://www.teachervision.com/problem-solving/teaching-methods/48451.html>

## Scenarios: GBN or 2x2 matrix

This chart (2x2 matrix) is to assist in the development of the scenarios. After research has been performed to determine trends, students should determine which two key drivers will bear the most influence on the future.



The drivers become the x and y axis. It is from here that the different stories are created. Questions to ask are what does this future look like if these drivers influence this type of behavior. From there storylines are developed.

For guidance and instructions see:

<http://ag.arizona.edu/futures/sce/sce-gbnmethod.html>

## Futures Wheels:

One tool that is effective to explore potential futures is the “Futures Wheel.” When looking to use the “Futures Wheel” think through the impacts of driving forces and trends, and let it help to develop the future scenarios with consequences of conceivable actions or inactions. Create at least three levels of wheels to provide enough information for 4 scenarios.