



**Al Byers**

**al@specialts.net**



**Building statewide k-16  
systemic partnerships: A look  
at the Connecticut NASA  
Education Collaborative**



# CT NASA Ed Collaborative

---

Al Byers

Previous Aerospace Education Specialist

Goddard Space Flight Center

Ph.D. Candidate-Instructional

Technology

Virginia Tech, Blacksburg, VA

540-953-7095/ [al@specialts.net](mailto:al@specialts.net)



# Aerospace Education Specialist



Curriculum development

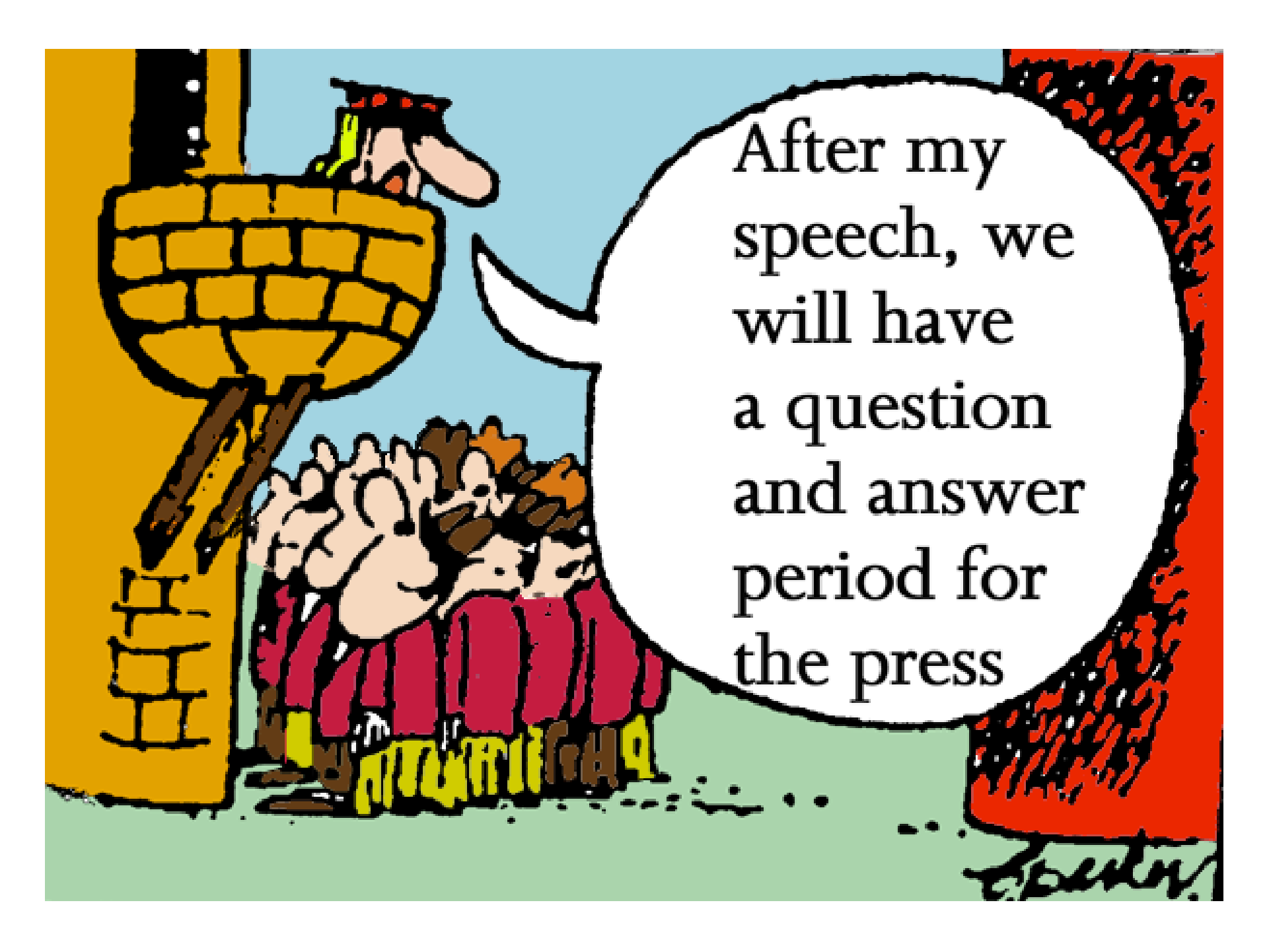
Teacher workshops

Student presentations

Systemic planning



# Questioning Strategies: Interaction at its best!

A cartoon illustration of a speaker at a podium. The speaker is a man with a large nose, wearing a red jacket and a brown hat, holding a microphone. He is standing behind a yellow brick podium. In front of him, a group of people, also wearing red jackets and brown hats, are looking towards him. A large white speech bubble with a black outline is positioned to the right of the speaker, containing the text: "After my speech, we will have a question and answer period for the press". The background is a simple blue sky and green ground. The artist's signature "E. Baker" is visible in the bottom right corner.

After my  
speech, we  
will have  
a question  
and answer  
period for  
the press

**HOO  
RAY**

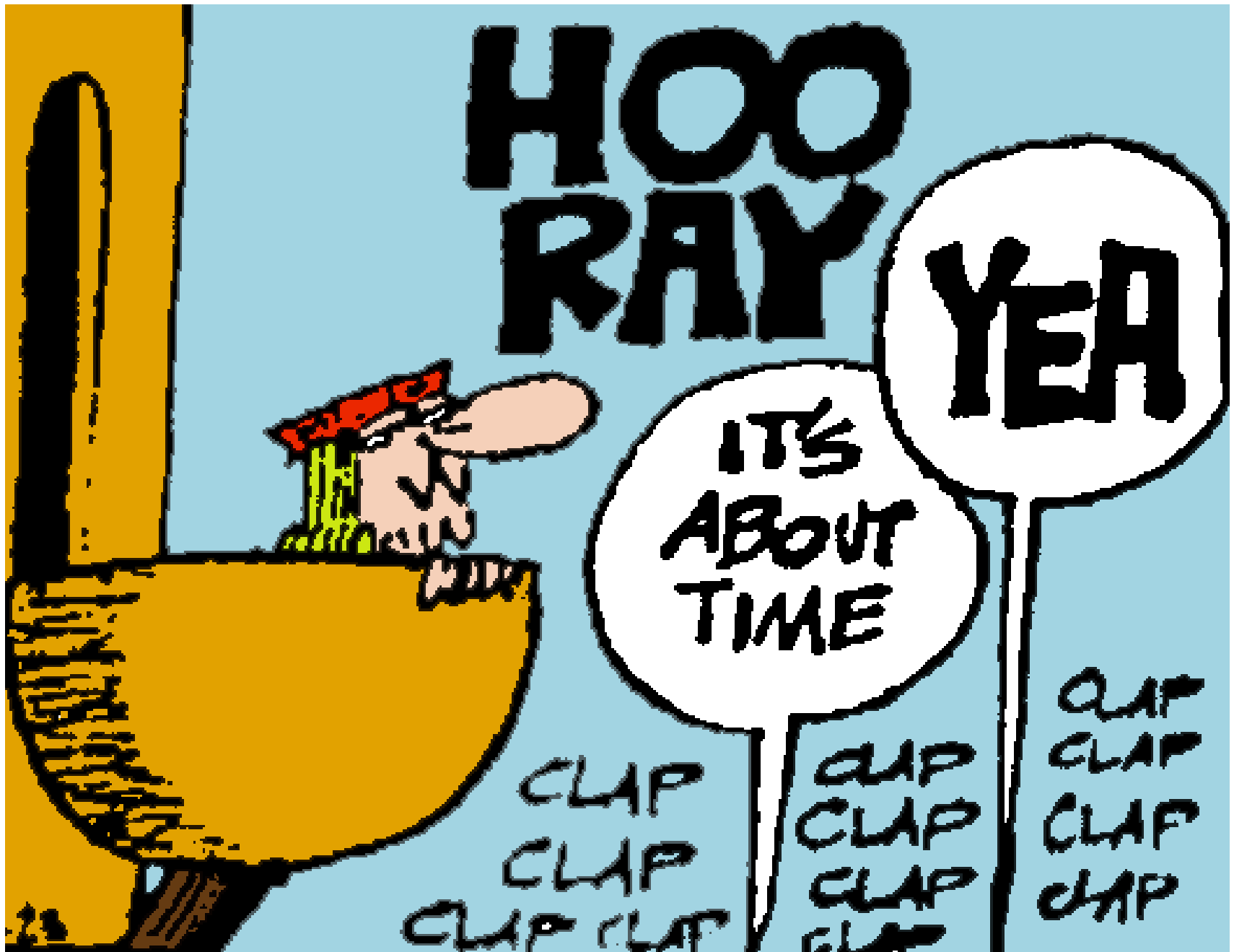
**YEA**

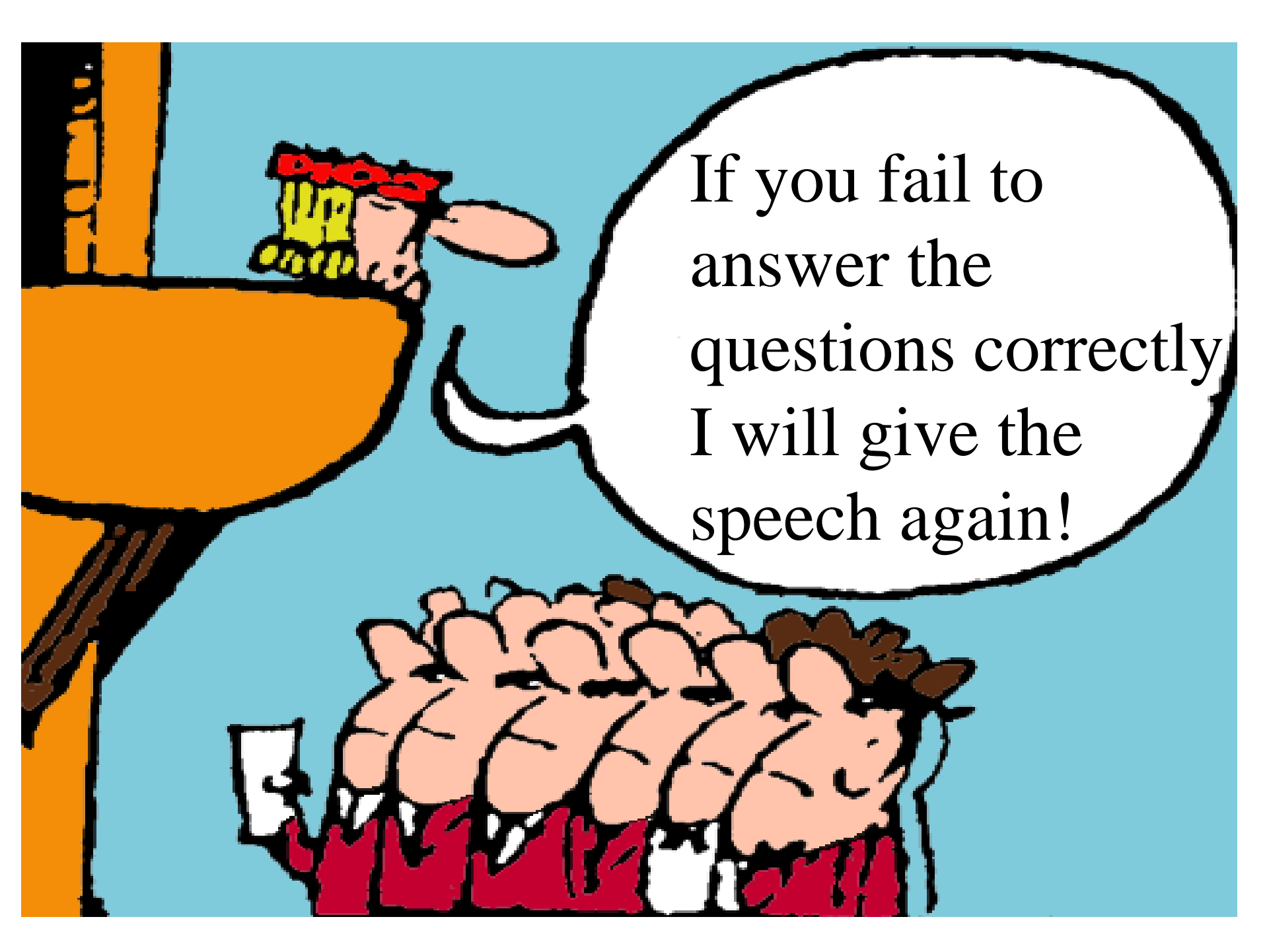
**IT'S  
ABOUT  
TIME**

CLAP  
CLAP  
CLAP CLAP

CLAP  
CLAP  
CLAP  
CLAP

CLAP  
CLAP  
CLAP  
CLAP



A cartoon illustration of a speaker on a stage. The speaker is a man with a large nose, wearing a red crown and a yellow and black striped garment. He is standing on a blue stage with a brown podium. A large white speech bubble with a black outline extends from his mouth, containing the text: "If you fail to answer the questions correctly I will give the speech again!". Below the stage, a crowd of people is shown from the chest up, wearing red jackets and white collared shirts. The background is a solid light blue color.

If you fail to  
answer the  
questions correctly  
I will give the  
speech again!





# CNEC Session Inquiry

---

- Position pole of audience?
- Why did you choose to attend this session?
- What are you looking to take away from this discussion?



# CNEC Session Overview

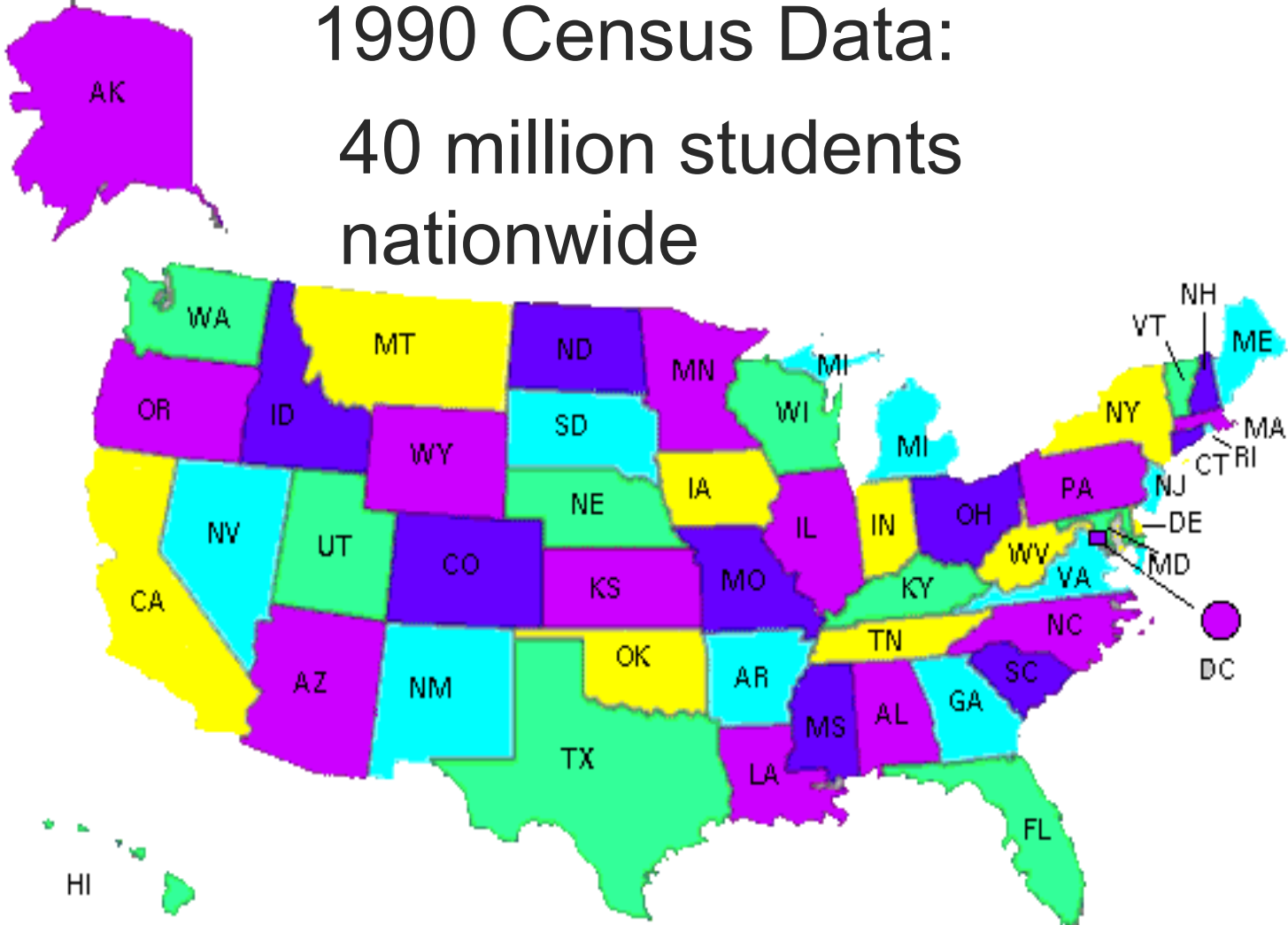
---

- CNEC Overview-reason formed
- Membership solicitation & selection
- Funding sources
- Framing the collaborative vision
- Support structures & protocols
- Implementation & kickoff
- Next steps-closing



# Here's the problem!

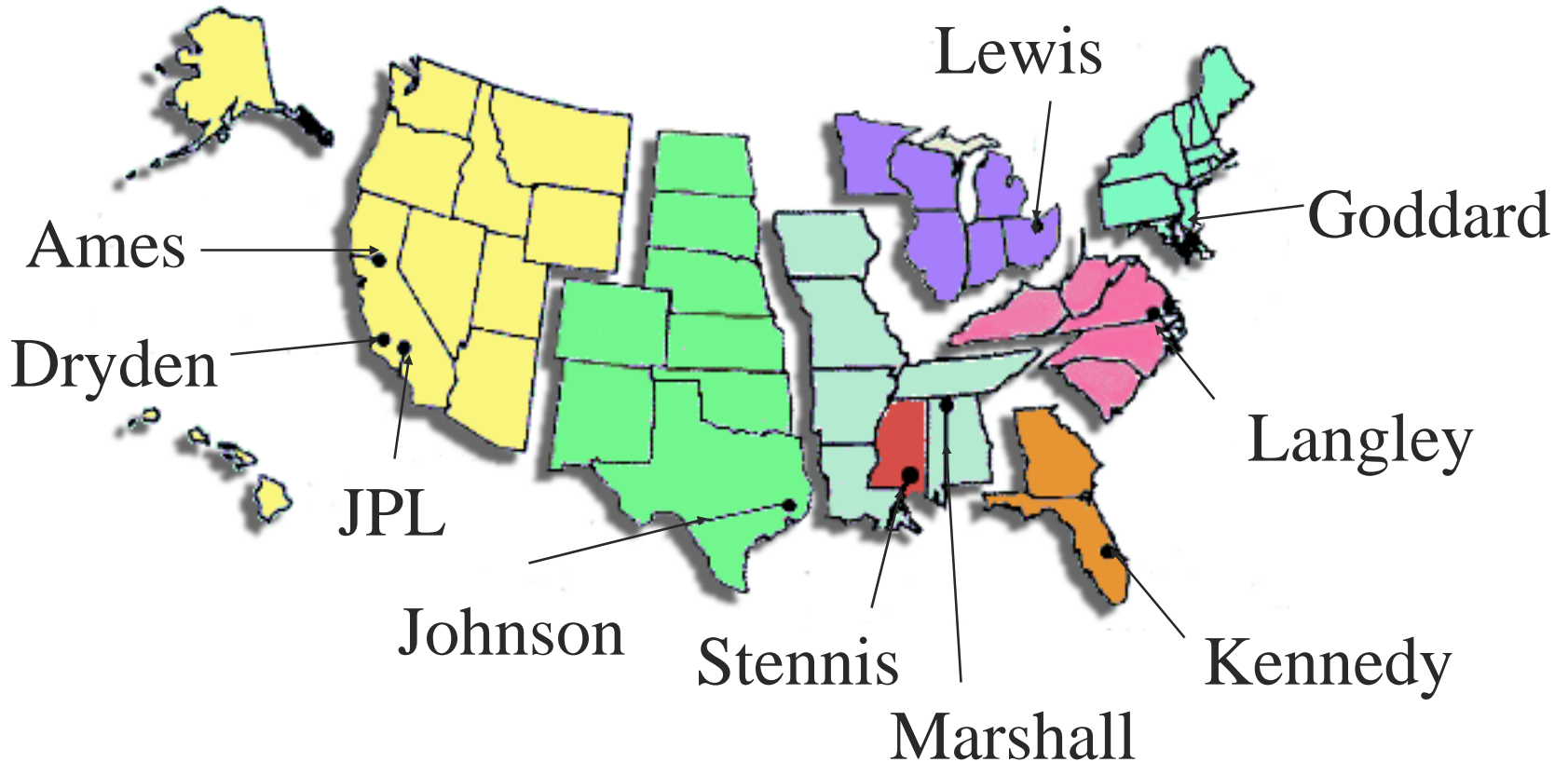
1990 Census Data:  
40 million students  
nationwide





# Here's the problem!

---





# CNEC Overview

## -reason formed

---

- School programs motivational but one shot
- Teacher workshops sporadic: no follow-up
- Teachers not know of or unable to reach the NASA Educator Resource Center



# CNEC Overview

## -reason formed

---

- Council of State Science Supervisors initial meeting at NASA
- Assign 1 state liaison from NASA to each state
- Coordinate efforts aligned to state DOE initiatives
- Leverage resources, maximize collective impact



# *CNEC-Membership Selection and Solicitation*

---

## DECISIONS:

Whom to approach at the statewide level

- Who are key players
- What is reason for inclusion into CNEC
- Foundation Players: State DOE  
Science Supervisor & NASA Goddard



# CNEC-*Membership Selection and Solicitation*

---

## DECISIONS:

How to approach key players once selected

- Letter of initial invitation extended from CT DOE with NASA GSFC support
- Informal science center host conference
- GSFC Education chief attend conference with CT DOE and invitees





# CNEC-*Membership Selection and Solicitation*

---

## Membership:

- CT Department of education (science & tech)
- CT Department of environmental Protection
- CT State Science Supervisors Association
- CT NASA Space Grant Consortium
- Eastern CT State University
- NASA Goddard Space Flight Center
- Informal Science Museums (4)
- NSF funded SSI player: CT Academy
- PIMMS Institute: Inservice teacher training



# CNEC-*Membership Selection and Solicitation*

---

## GROWTH DECISIONS:

- How to select future members
- Ramp up membership cautiously
- Have vision statement in place
- Bring in partners that support future endeavors and vision



# CNEC-Funding Sources & Solicitation

---

- Global Environmental Change grant
- Aerospace States Association-systemic grant
- CT DOE Eisenhower teacher training funds
- CT NASA Space Grant k-12 support funds
- Informal Education Institutions
  - Graphic design support (flyers)
  - Donation of physical space
  - Logistical planning of teacher training



# CNEC-Funding NASA Procurement

Netcape: NASA Financial And Contractual Status (FRCS)

Back Forward Reload Home Search Guide Images Print Security Stop

Netrite: <http://procurement.nasa.gov/facs/html/usmap.html>

## NASA Acquisition Internet Service

<a href="#">NAIS Home</a>	<a href="#">Business Opportunities</a>	<a href="#">Procurement Reference Library</a>
<a href="#">Center Procurement Sites</a>	<a href="#">E-Mail Notification Service</a>	<a href="#">Feedback</a>
<a href="#">FACS Home</a>	<a href="#">FACS - Ad Hoc Query by Contractor</a>	<a href="#">FACS - Contract Number Query</a>

Click on State to Select or click [HELP](#) for query information:

A map of the United States where each state is colored and labeled with its two-letter abbreviation. The colors are: WA (yellow), OR (green), CA (light blue), NV (red), UT (green), AZ (purple), HI (red), AK (red), ID (cyan), MT (cyan), WY (yellow), NE (magenta), KS (red), OK (purple), TX (green), CO (cyan), MN (green), IA (purple), MO (red), WI (red), IL (yellow), IN (cyan), OH (magenta), KY (red), TN (purple), MS (magenta), AL (red), GA (red), SC (cyan), NC (magenta), VA (red), WV (red), PA (red), NY (red), NJ (red), CT (red), RI (red), VT (red), NH (red), ME (red), DE (red), MD (red), DC (red), FL (yellow), LA (yellow).



# CNEC-Funding NASA Procurement

## NASA Acquisition Internet Service

<a href="#">NAIS Home</a>	<a href="#">Business Opportunities</a>	<a href="#">Procurement Reference Library</a>
<a href="#">Center Procurement Sites</a>	<a href="#">E-Mail Notification Service</a>	<a href="#">Feedback</a>
<a href="#">FACS Home</a>	<a href="#">FACS - Ad Hoc Query by Contractor</a>	<a href="#">FACS - Contract Number Query</a>

### STATE OF CONNECTICUT

NASA Center: ALL

Fiscal Year: FY 99

*click on Congressional District for more details*

<b>Congressional District</b>	<b>FY Obligations</b>
ALL	\$92,029,154
01	\$10,315,137
02	\$3,154,745
03	\$3,119,348
04	\$148,212
05	\$5,230,734
06	\$70,060,978

**6 districts were found.**



# CNEC-Funding Sources & Solicitation

---

Idea is not to support each institutions  
individual goals & projects

**But...**

Collective agreed upon initiatives of CNEC

**Allowing...**

Each institution to capitalize upon its unique  
strengths



# CNEC-Framing the collaborative vision

---

## Beginning Initiatives

- Partner centers- NASA material distribution
- Global Environmental Change Education
- Business solicitation action plan
- CNEC web site development
- Informal Education: systemic teacher training



# CNEC-Support structures & protocols

---

## Communication structures

- NASA donated CNEC listserv
- NASA provided email addresses
- CNEC web site
  - contributed design & hosting of site
  - CGI scripting for automated form inquiries & automated workshop registration






# CNEC-Support web page

Netscape: Connecticut NASA Education Collaborative-Entry Page

Back Forward Reload Home Search Guide Images Print Security Stop

Location: <http://www.specialts.net/CNECfinal/Pages/index.htm>



*Uniting the worlds of Education*

28.8 Modem or lower (mostly text) / 28.8 or higher Modem (more graphics)  
This site is best viewed with Netscape (version 3.0 or later) or Internet Explorer (version 3.0 or later) This will allow you to take advantage of certain option windows throughout the site. Click on the links above or icons below to go directly to these sites for downloading of these or later versions.

<http://www.specialts.net/CNECfinal/Pages/index2.htm>

The screenshot shows a Netscape browser window. The title bar reads "Netscape: Connecticut NASA Education Collaborative-Entry Page". The address bar shows the URL "http://www.specialts.net/CNECfinal/Pages/index.htm". The main content area features a large, stylized logo for the "Connecticut NASA Education Collaborative". The logo consists of the word "Connecticut" in a gold, cursive font at the top, a green map of the state of Connecticut in the middle with a NASA logo overlaid, and the words "Education Collaborative" in a gold, bold font at the bottom. Below the logo is the tagline "Uniting the worlds of Education" in a red, italicized font. Further down, there is a paragraph of text in purple and black, providing information about browser requirements and navigation options. The status bar at the bottom shows the URL "http://www.specialts.net/CNECfinal/Pages/index2.htm".



# CNEC-Support structures & protocols

---

## Protocols:

- Meet every 2 months
  - Informal education center
  - Full attendance by members
- Generate correspondence
  - Meeting notes
  - Next steps
  - Monthly agendas



# CNEC-*Execution* *of launch kickoff week*

---

## Grand Opening Events

- Governor Proclamation of CNEC week
- IMAX “Mission to Mir” premiere in CT
- Mir Astronaut guest lecturer
- NASA Online with Teachers
- Live Johnson Space Center-virtual tour
- Discover Space-AESP activities



# CNEC-Closing

---

## Next Steps

- 3-year education plan
- Summative evaluation results
- Follow-up support AESP structures
- Sustained funding
- Career to Work initiative



# CNEC-Closing State systemic initiatives

---

NASA Center serving a state

<http://education.nasa.gov>

NASA ERC within a state

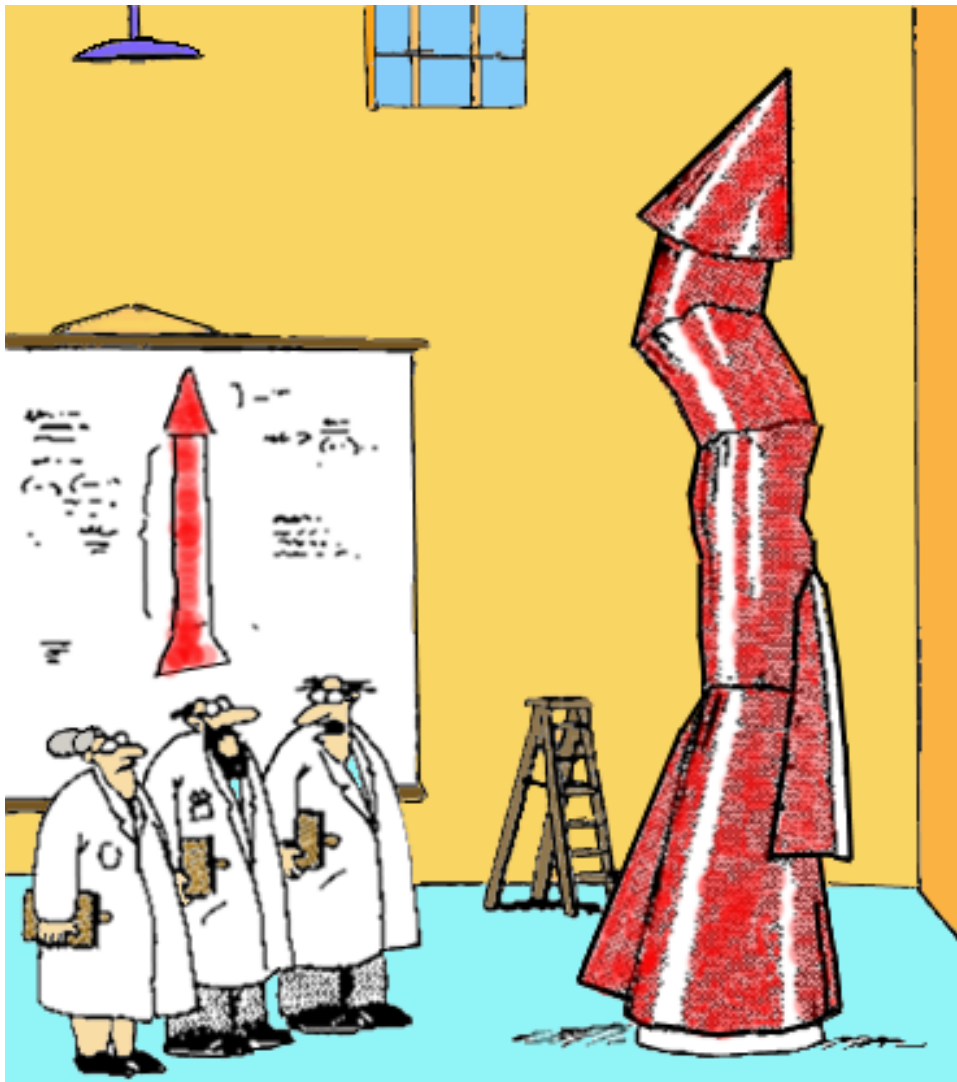
<http://spacelink.nasa.gov/ercn/>

NASA AESP systemic national program

<http://www.okstate.edu/aesp/AESP.html>

NASA Procurement Homepage

[http://procurement.nasa.gov/facs/html/  
usmap.html](http://procurement.nasa.gov/facs/html/usmap.html)



It's time we  
face reality  
my friends...

We're not  
exactly  
rocket  
scientists!



# Bottom Line....

---



To serve  
our  
customers