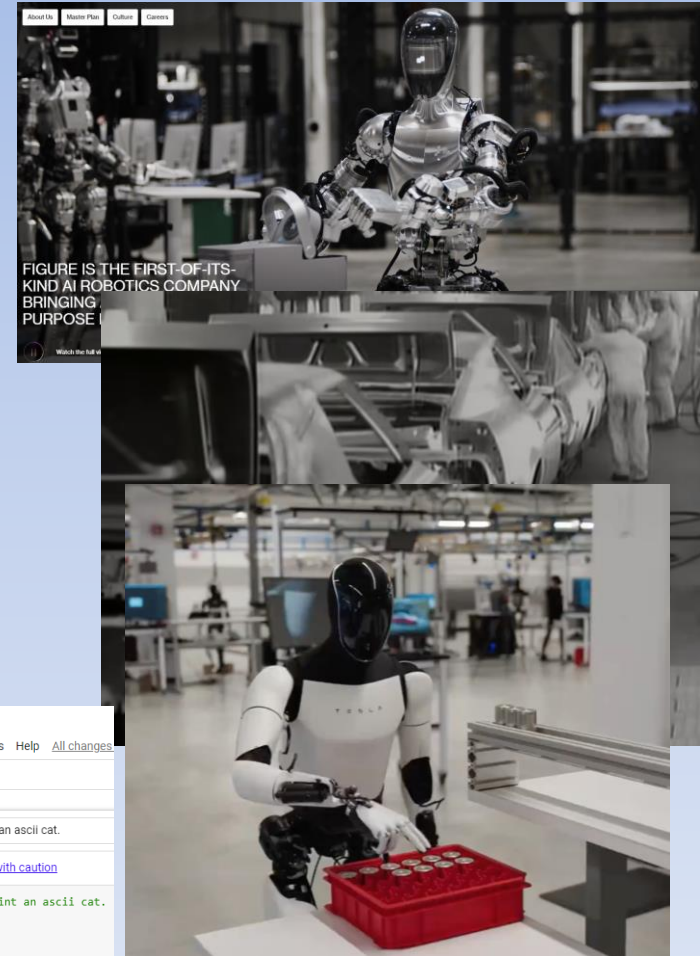


Welcome Spring 25: Exciting Times

- Artificial Intelligence
 - AI & Manufacturing (Robots)
 - AI & Data
 - AI & Education
- All Perspectives Critical!
 - Success requires engagement!

A screenshot of a Gemini chat interface. The user prompt is "Explain the code generated." and the Gemini response is "The code prints an ASCII art representation of a cat to the console. Each print statement outputs a different line of the cat, using characters to form the shape of the cat." Below the text is a code block containing Python code that uses print statements to create an ASCII art of a cat. At the bottom, there are sources and a "Rate this answer" button.A screenshot of an AI Coding Example interface. The prompt is "Generate Code to Print an ascii cat." and the generated code is a Python script that prints an ASCII art of a cat. The interface includes a "Generate" button, a "Use code with caution" link, and a "1 of 1" indicator. At the bottom, the generated ASCII art is displayed.

Topics

- What are we learning?
 - Core Content
- What Do I Bring?
 - Experiences: Southeast Fresno to CSUF BA
 - Experiences: PhD in AI + Work in Orange County
- What's the plan?
 - Construct Learning Environment w/
 - Abstractions
 - How we learn.
 - How we share.
 - Engagement
 - Engagement Encouragement
 - Engagement encouragement part of my personal story
- What do you bring?
 - Engagement!
 - Learning Environment requires ENGAGEMENT!
 - Personal Perspectives
- Evaluation:
 - Engagement
 - Content

Key Idea: Abstractions

- Enhance Thinking and Communication
 - Advances critical thinking
 - Helps in sharing ideas through generalization
 - Highlights conflicts and compatibilities
- Simplify Complexity
 - Simplifies intricate concepts
 - Hides unnecessary details
 - Creates layered information for easier understanding
- Interface w/ AI
 - Abstractions of world facilitate data creation
 - Abstractions of problems facilitate decomposition

PhD Idea w/ Memories

Replay Memories are Abstractions.. Not stored complete!

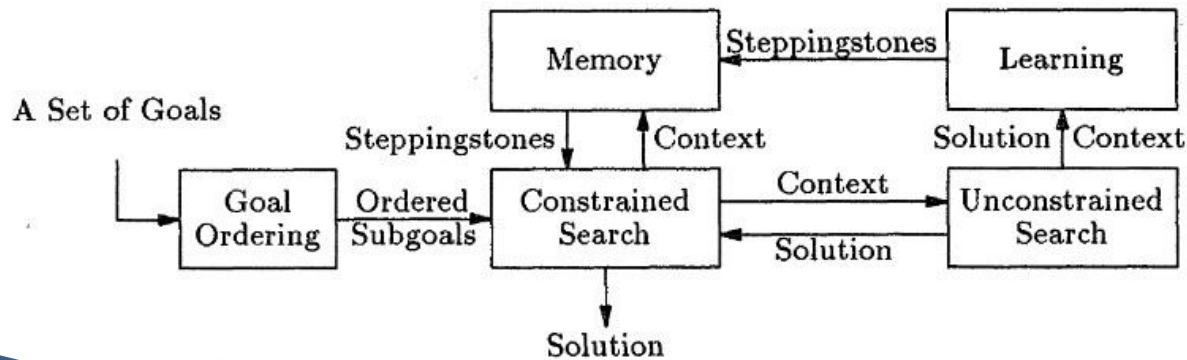


Figure 1: Overview of SteppingStone

Memories have gaps!!!

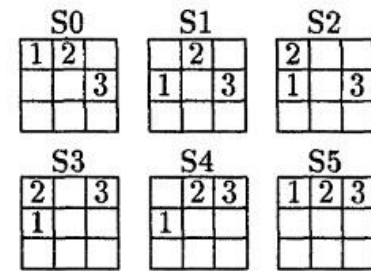


Figure 2: Steppingstones from Memory

the original impasse.
When memory fails to recall steppingstones the constrained search component sends the context to the unconstrained search component. The unconstrained search component takes as input a context, just as the memory component did. Unconstrained search relaxes the protection on the solved subgoals in its search for a solution. If it resolves the impasse, it returns the sequence of moves found to the constrained search component. The unconstrained search component also sends its impasse solution, along with the context, to the learner.

Personal Pedagogy

- Communication Involves Abstractions
 - Abstractions of Reality & Imaginary Worlds
 - Data and Metadata
 - Text & Subtext
- Learning Involves Abstractions
 - Coding Constructs
 - Algorithms
 - Coding Libraries
- Engagement Everything
 - Engaging enables learning!

Participation

- Attendance:
 - Engagement is required
 - Class engagement requires some attendance
- Roll Taking
 - As needed
 - Random
 - Some Sign-In
 - Quizzes/Tests
- Online Discussions
- Participation Assignments
 - Designed to encourage interaction with content

Assignments

- Engagement
 - Timely
 - Meeting requirements
- Content
 - Correctness
 - Complexity
 - Effort
 - Polish

Quizzes

- Quizzes in Canvas.
- Measure of understanding
- Practice for exams

Exams

- Measure of understanding
- Weighted by assignment work
- Weighted by participation

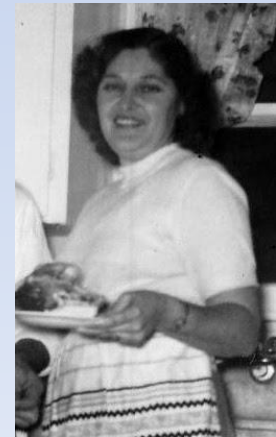
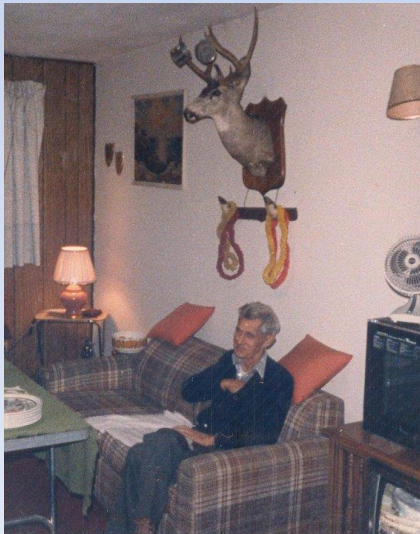
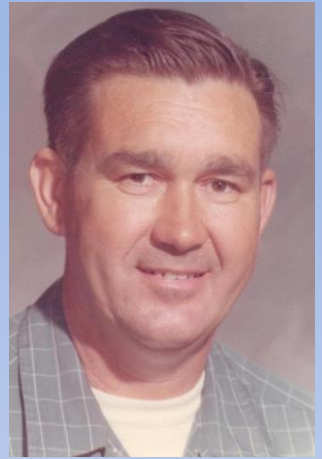
Canvas

- Canvas Class Notes
- Canvas Quizzes

Who Am I?

Personal Abstraction

- Can Abstract Connections Improve Engagement?
- Fresno Fairgrounds Area:
 - Lane Elementary '73
 - Sequoia Junior High '77
 - Roosevelt High School '80
 - Fresno State '84
- Struggled Some w/ Connections
 - Supported Thru: Abstractions



Conflicts Common!

Teachers go on Strike

Fresno teachers went on strike for the first time in the city's history. Negotiations for a new contract between the Fresno Teachers' Association and the Fresno School District broke down and on November 19, 1978, the teachers voted to strike.

Although there were some 18 separate issues, the major stumbling block was class size. Many Fresno teachers felt that a maximum number of students in each classroom must be guaranteed to insure a quality education. The teachers offered to give up 1% of a promised salary increase if Governor Jerry Brown lifted proposition 13 payfreeze to hire more teachers in an effort to lower class size. Since salary was not an issue, the strike is noted as being one of the first teachers' strikes in the nation aimed at improving education for their students. Approximately 1,000 of the 2,400 Fresno teachers went on strike the first day and over half of Roosevelt's staff formed a picket line around the campus.



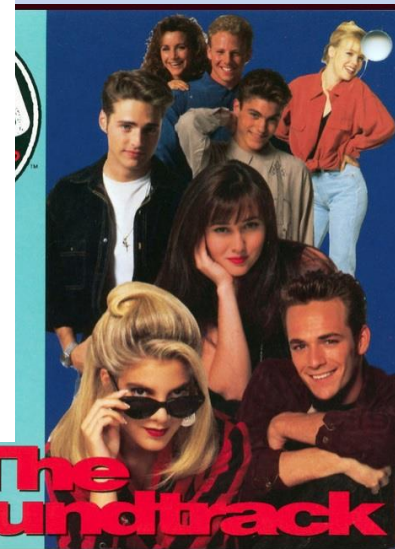
Student Protest

Students and a few adults march in front of Sequoia Junior High School to protest the firing of metal shop instructor Jose Haro. The demonstration, held during the noon hour, was peaceful. Haro, a second-year teacher at the school, was fired on a 3-2

vote by the Fresno Unified School District Board of Trustees Monday night. The district charged he operated the metal shop in an unsafe manner. His supporters claim he was dismissed because of personality and value conflicts because unsafe conditions at the metal shop at Sequoia also exist at metal shops at other junior high schools in the district. **See Photo**



Anxiety grows (upper left) as teachers meet before the strike. Teachers (left) talk over future actions. Talking over their different points of view on the strike (upper) are Mr. Barton and Mr. Hamilton. Students (upper right) found the strike wasn't all the fun they thought it would be. One of the many friendly faces found on the picket line (right) is Mr. Newcomb. Rain or shine, teachers Mr. Schneider and Mr. Hergenroder (above) stood up for the cause.



Conflicts Common

My Neighborhood: Abstractly



- Cars
- Fences
- Landscape
- What can we infer?
 - Avoid conflicts.