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# OpenLabyrinth for Learning and Teaching

Topps, David

Taylor Insitute Teaching Community

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<http://hdl.handle.net/1880/50340>

*Downloaded from PRISM Repository, University of Calgary*

# Virtual Patients

David Topps  
Heather Armson

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# OpenLabyrinth Virtual Patients

<http://openlabyrinth.ca>

# Workshop Outline

- Introductions & Needs
- Overview of Virtual Patients
- Case examples
- Conclusions and next steps

# Introductions

- Who are you?
- Role in education?

# **Overview of Virtual Patients**

# **What are Virtual Patients?**

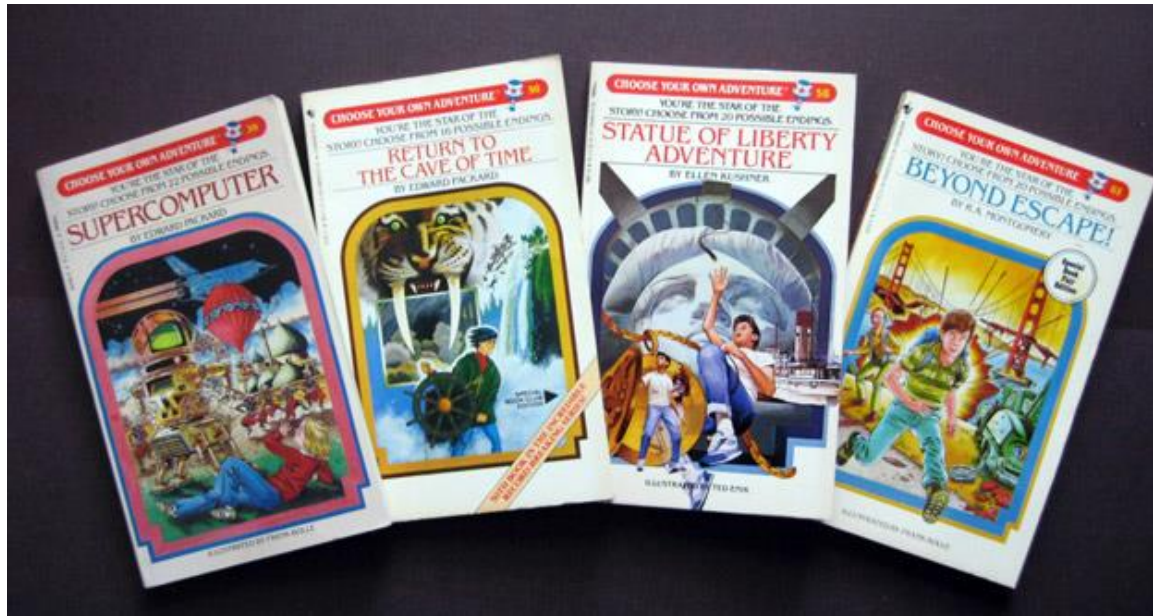
# Not Virtual Reality





# **Power of the Narrative**

# Choose Your Own Adventure



# Branching and Linear cases

- Dealing with the consequences



# Sarah-Jane case

St George's University, London

[http://www.elu.sgul.ac.uk/virtualpatients/examples/sarah\\_jane/SJP\\_h\\_21\\_NT\\_HM.html](http://www.elu.sgul.ac.uk/virtualpatients/examples/sarah_jane/SJP_h_21_NT_HM.html)

**“The pictures are better  
on the radio.”**

**Alistair Cooke**

# Cues in the environment

You go to see Sarah-Jane. OK you finish the cup of tea and the documentary first. It takes 15 mins to drive to her house, in a rather isolated part of the catchment area. When the door is answered, her mother, Ruth takes you inside and into the lounge. The whole house is a mess, with clothes, papers, bills and dirty plates strewn around.

The baby is sitting in her bouncer chair. Next to her is the dog, asleep on the floor. It smells. There is another child, maybe 3 years old watching TV in the room.

You ask the mother some questions and find out these details:-

She had a runny nose yesterday.

Her cough started this morning. It seems tickly - it keeps annoying her.

She vomited once this afternoon.

There has been no diarrhoea or temperature.

She has been well since discharge from hospital 3 months ago.

What would you like to do?

Examine her Ask more questions Treat her Send to hospital Review in the morning

# **Uses of Virtual Patients**

- **Simple case presentations**
  - **Shorter rather than longer**
- **Self-directed learning**
- **Small group discussions**
- **Flipped-classroom approach**
- **Assessment of problem solving**



# PINE Library

## PINE: Too Many Homers in Springfield

**Start**

Welcome to Springfield!

You Are Ginette, A Registered Dietitian

Review your pathway



## PINE: Northern Hike

**Northern Hike**

It is early summer, a beautiful sunny day but cool. You are a medical student and have made plans with colleagues that you have met on a summer rotation to hike the Cup and Saucer trail on Manitoulin Island.

The trail starts as an easy to moderate uphill climb through hardwood bush, but does involve some non-technical but light climbing to reach the summit of the escarpment. There is a short adventure trail option that has the most challenging terrain. Parts of the trail are rocky with loose scree. The trail down is similar. The total distance of the route chosen is 18k.

Your new friends call at 1:00 and ask you to organize what they would need to hike on the hike. Louisa, a physiotherapy student, is bringing a water bladder pack. Mark, a nursing student, wants to carry very little he takes great pride in minimalist packing.

What would you choose to take on this hike? Choose as many "kts" as you think appropriate



KR 1  
KR 2  
KR 3  
KR 4  
KR 5

## PINE: Cheerful Charlie

**Midnight In A Small Town Hospital's Emergency Room**

It is midnight in a small town hospital's Emergency Room department where you, a family physician, have been working since 5:00 pm that evening, and are looking forward to the end of your shift.

**What Do You Want To Do Now?**



As you are contemplating your thoughts, a young man in a dirty t-shirt comes in complaining of pain in his right hand.

## PINE: Team Leader or Team Bully

**You Are Approached By Eric, The Team Physiotherapist**

The two of you often don't see eye to eye. He tells you that during the meeting, concern was expressed about Mrs. Potts' ability to return home without 24 hour supervision.

The team decided that because you have the "best rapport" with the client, that you should be the one to go home for a whole day with Mrs. Potts to "see how she does". You can't believe the team made this decision on your behalf when you weren't even present! You also wonder if you're the best qualified person to do the home visit with Mrs. Potts.



What would you like to do?

Complain To The Unit Manager  
Call Your Regulatory College's Practice Advisor

## PINE: Patient Centred Care

**Seek Out The Family To Find Out What's Going On**

The family wants M. Dubois discharged immediately as he does not like to be in hospital. What do you do next?

Discharge M. Dubois From Physio Caseeload  
Review The Chart  
Try Something Else  
Tell The Family That You Will Relay Their Wishes To The Team

Review your pathway



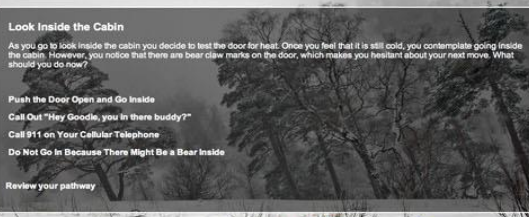
## PINE: Brokeback Trapline

**Look Inside the Cabin**

As you go to look inside the cabin you decide to test the door for heat. Once you feel that it is still cold, you contemplate going inside the cabin. However, you notice that there are bear claw marks on the door, which makes you hesitant about your next move. What should you do now?

Push the Door Open and Go Inside  
Call Out "Hey Goodie, you in there buddy?"  
Call 911 on Your Cellular Telephone  
Do Not Go In Because There Might Be a Bear Inside


Review your pathway



## PINE: Don't Jump to Conclusions


**Start**

You are a nurse and today is Canada Day. It is sunny outside and you are not particularly pleased because you are missing the Unit BBQ while working a double shift. Sigh.



You Are Called To See Mr Benedict

Review your pathway



## PINE: Challenges in Community Care

**You Are Tanis, A Physiotherapist Working With An Agency Contracted To Provide Home Health Care Services**

You have worked with this agency for 5 years. The majority of your caseload is older adults who are experiencing difficulty with mobility. Today you have received a referral for Mrs. Blinaski, an 85 year old woman who lives alone. The referral is asking you to perform a mobility assessment within the next 2 days for this woman who has been experiencing falls. The referral indicates that an OT referral is also pending for a home safety assessment. It also indicates that social work services are currently in place. What would you like to do as the first step in responding to this referral?



Review your pathway

Contact Mrs. Blinaski To Schedule An Appointment Independently  
Contact The Occupational Therapist To Discuss Performing A Combined Assessment  
Contact Maria The Social Worker To Obtain Background Information



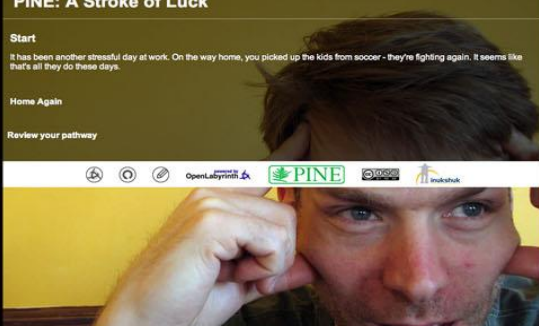
## PINE: A Stroke of Luck

**Start**

It has been another stressful day at work. On the way home, you picked up the kids from soccer - they're fighting again. It seems like that's all they do these days.

**Home Again**

Review your pathway



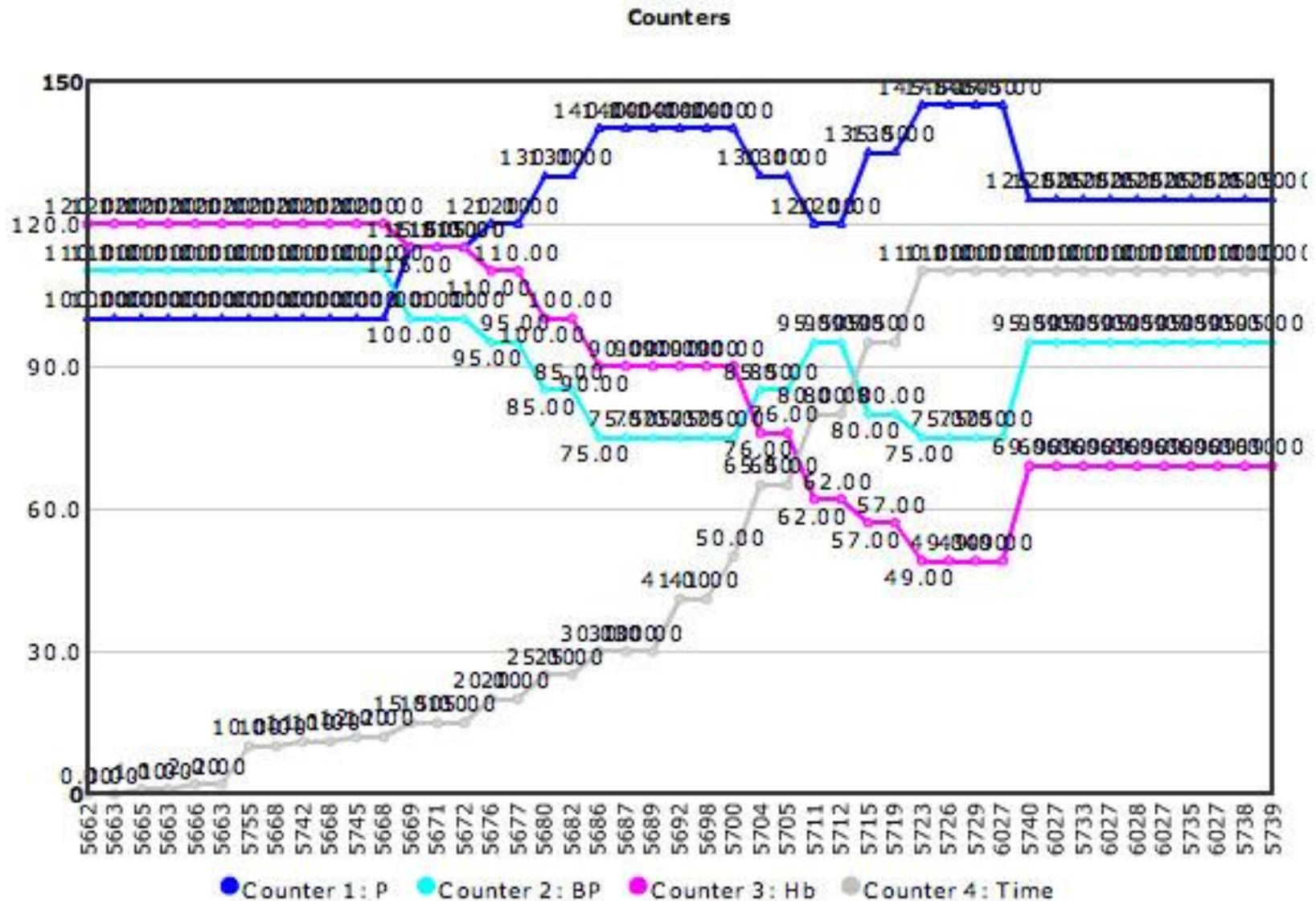


# Everything is tracked

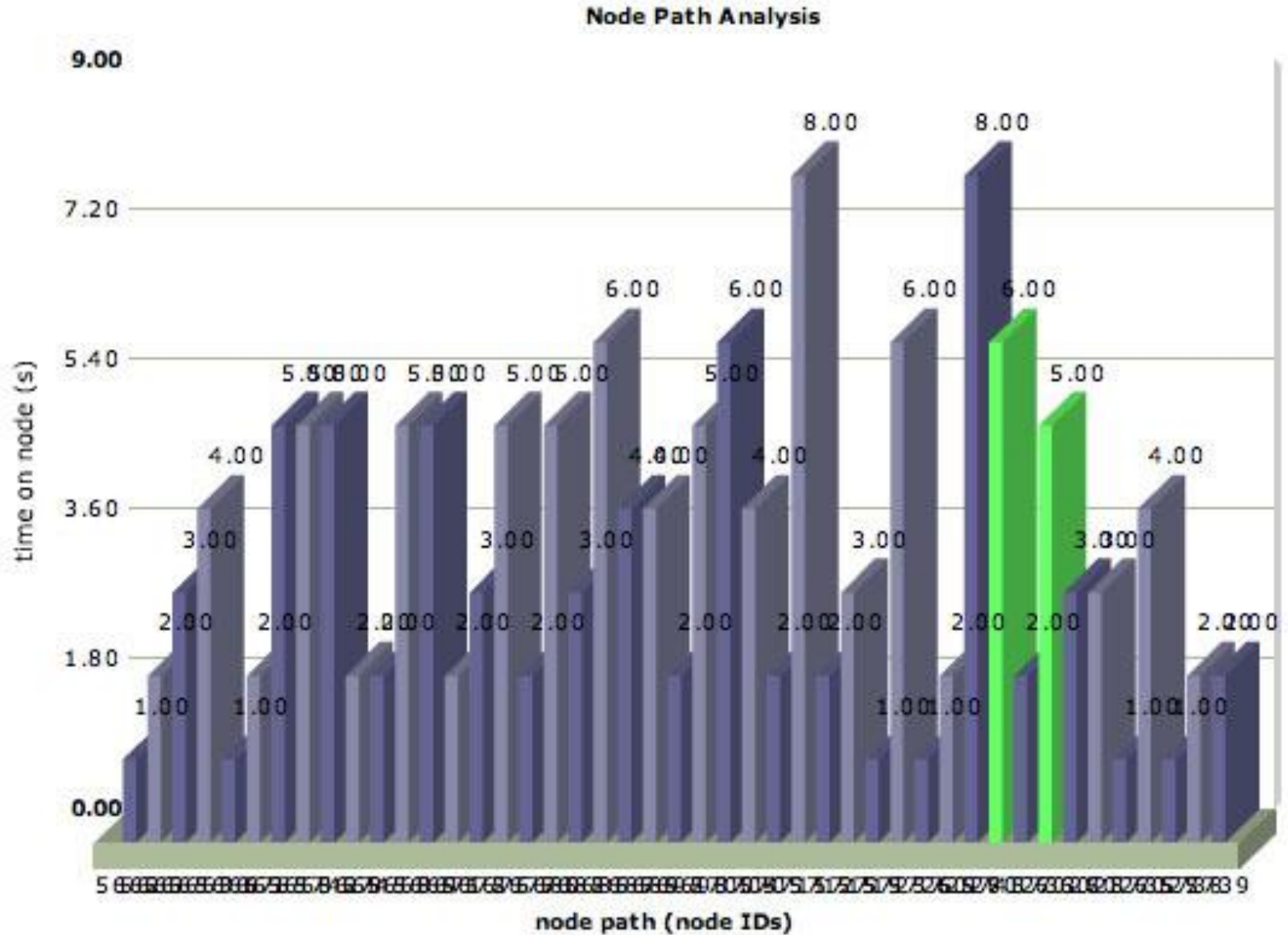
- **Timing**
- **Paths**
- **Counters**



# Everything is tracked



# Everything is measured



# Assessment of problem solving



# Situational Judgment Testing

- Better for non-clinical  
eg ethics
  - <http://demo.openlabyrinth.ca/renderLabyrinth/index/382>

## START

Welcome to **Virtual Residents**, a 'game' inspired by many years of training preceptors, teachers, or mentors many have experienced and brought to challenges. With these scenarios in mind, we would like to introduce you to **students and teachers**. Using Situational Judgment Testing (SJT) we will present scenarios. For these, there is often no single right answer.

For more information about how to play this different style of cases, please do not use 'Drag & Drop' responses before, check out our 1 minute video here.

## Drag & drop questions in OLab3.mp4

### START

This is to show what can be done with Drag & Drop Questions.

Use your mouse to drag each of these 3 items into what you think is the correct order. Do not just click on them.

Note that if you do not change the order of the items, nothing is recorded.

Which action is most important?

Finish the case

Make the effort

Now click the [Evaluate] button below.

Author note: Case authors will need to keep in mind that the User at least finds something to change about the order, or else no response is recorded.

Evaluate rule

NodeID (0)  
DragonDone (0)

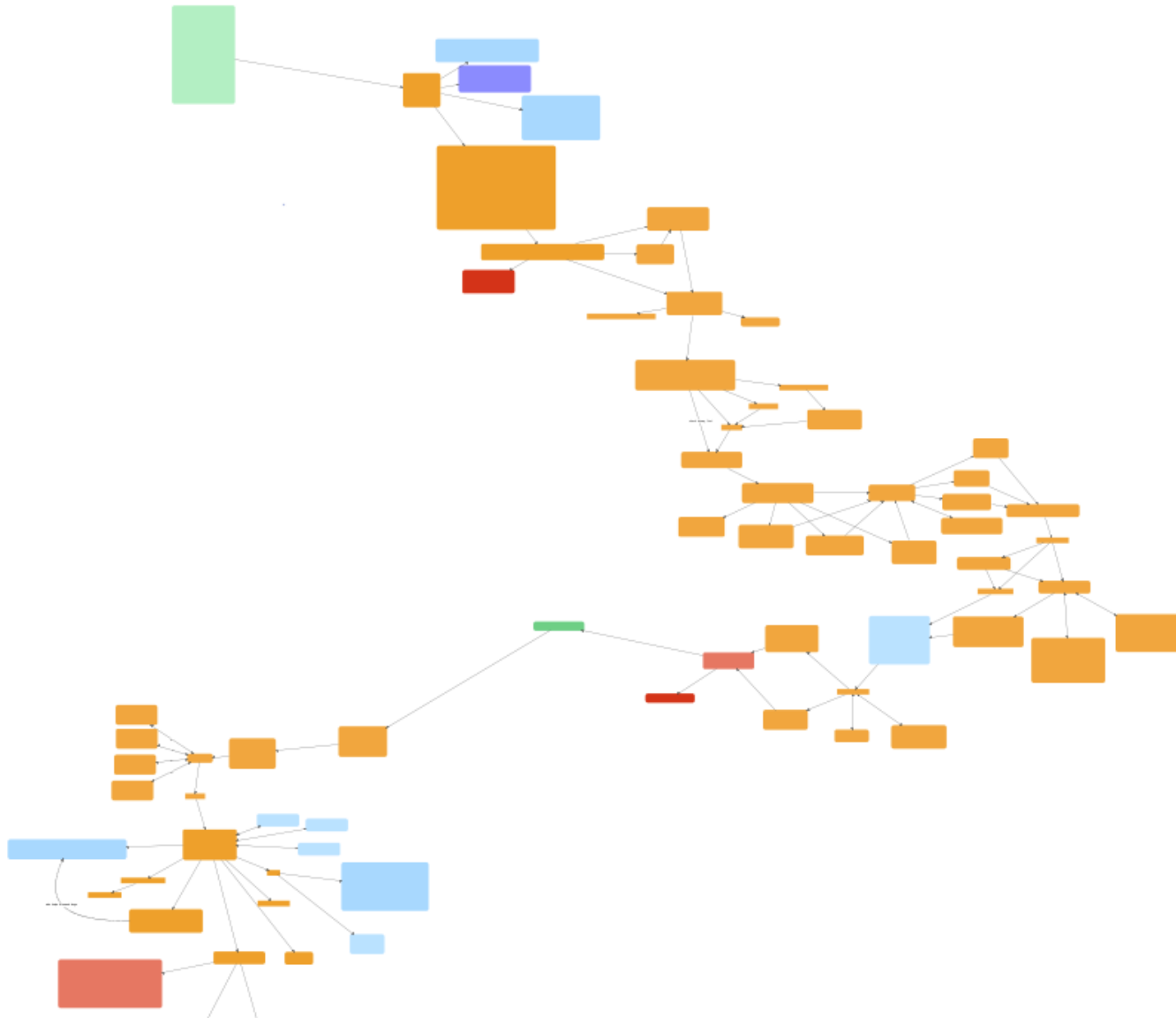
Review your pathway

Map: Dragon Breath...  
example of drag drop  
questions (1/1)  
Nodes: 1/10/13  
Score:  
bookmark  
turn editing on  
reset  
powered by  
OpenLabyrinth  
OpenLabyrinth is an open  
source educational pathway  
system

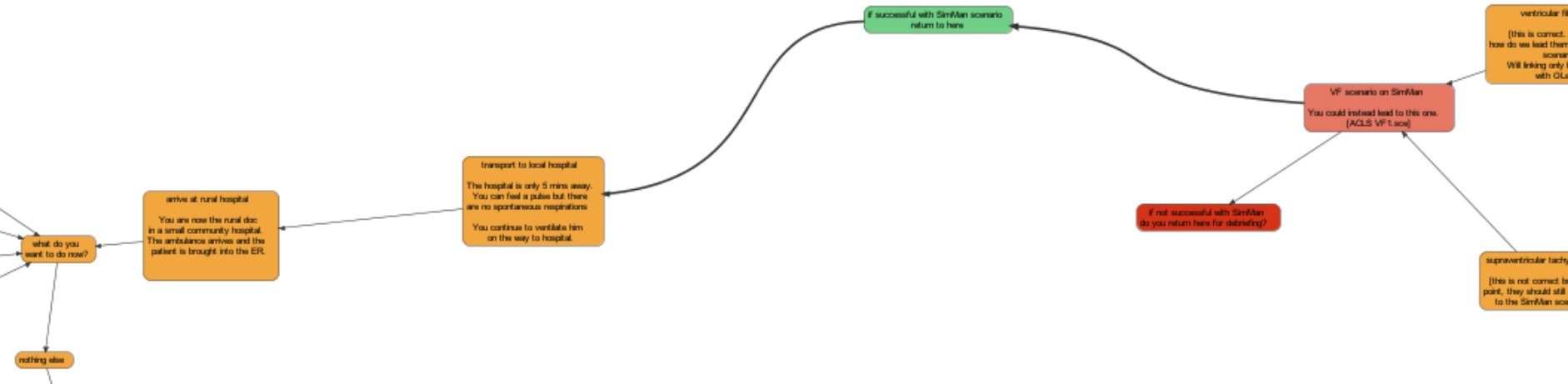
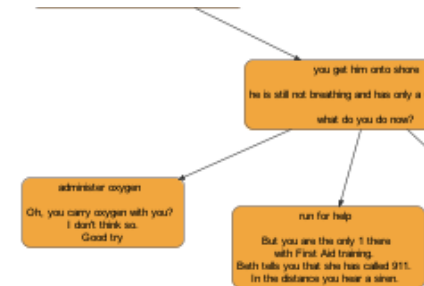
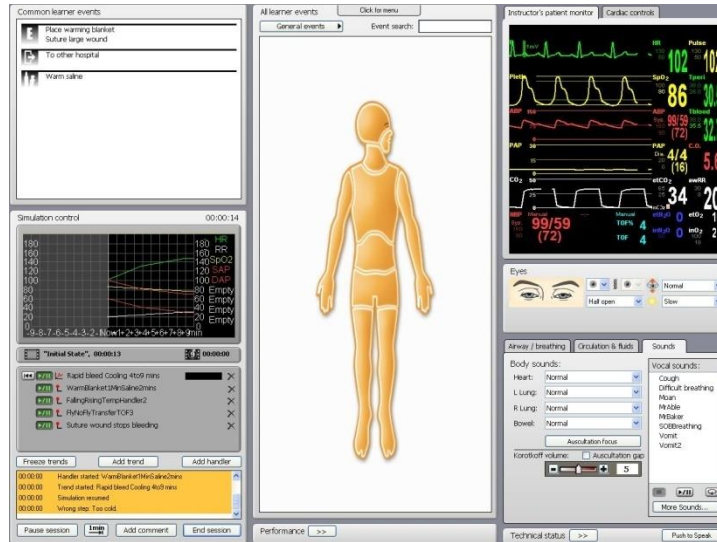
0:00 / 0:52

YouTube

# Virtual patients as bookends



# Breakout to SimMan



# Virtual EMR



Name: **Lobak Test**  
Ins#: **11111-1111**  
DOB: **19-Nov-1960**

Gender: **Male**  
Chart#:   
Age: **50**

Cellular Phone: **(403)**  
Provider: **D. Topps**



MD: **Topps, David**

My Tasks My Bills Chart Schedule Templates Reports Logout

Demog Visits Tasks Bills Allg Meds Profile Labs Invest Consults Imm Goals Summary

## Visit

Return Visit

Template: ☐ Save as template

## Subjective

Concern: Code:

## Assessment Profile Allg

Diagnosis: Code:   
back disorder nos 724.9

Medical   
Billing Item: Code:

Plan Task Inv Con Lab Imm Diag

Select Care Plan... Plan Active Meds... Med

Start: 29-Jan-2011 09:01 PM

End:

Disposition:

Insurer: **AB - 11111111**

Date: **20-Jan-2011** **09:01 AM**

Provider\*: **Topps, David**

Billing Provider: **Topps, David**

Save Visit

Sig neuro Sx	No	
Major trauma	No	
Steroid/imm suppr.		
Age > 50		
Previous CA	No	
Osteoporosis		
Fever, night sweats		
Pain worse at night?	No	

## Subjective Note

Still getting sciatica like pain. No power loss. No trouble standing up from sitting.  
No bowel or bladder symptoms.  
Fed up with ongoing WCB battle. Report due...

## Objective Note

Mildly antalgic gait. SLR 60deg both sides.  
SIGECAPS negative.

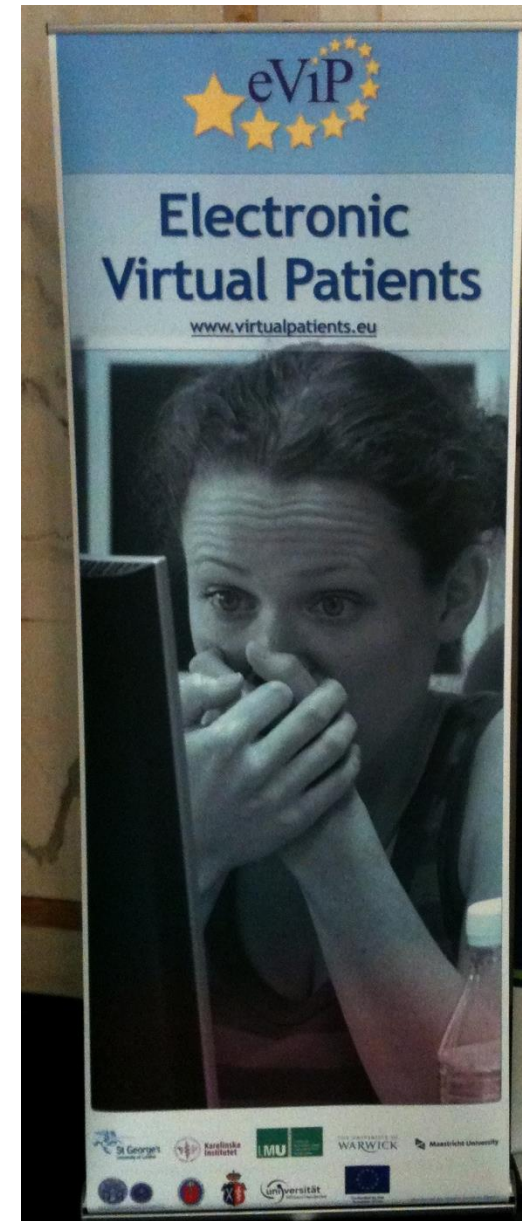
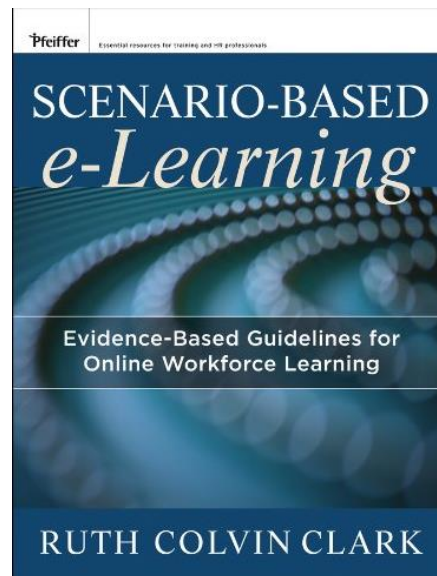
## Assessment Note

Narcotic use increasing.  
Needs other approaches to pain

## Preceptor's notes

# Learning from mistakes

- Err in safety
- Scenario Based Learning
  - Ruth Colvin Clark



# Your ideas...?

Work in 2-3's

Return in 5 mins





Complexity isn't everything



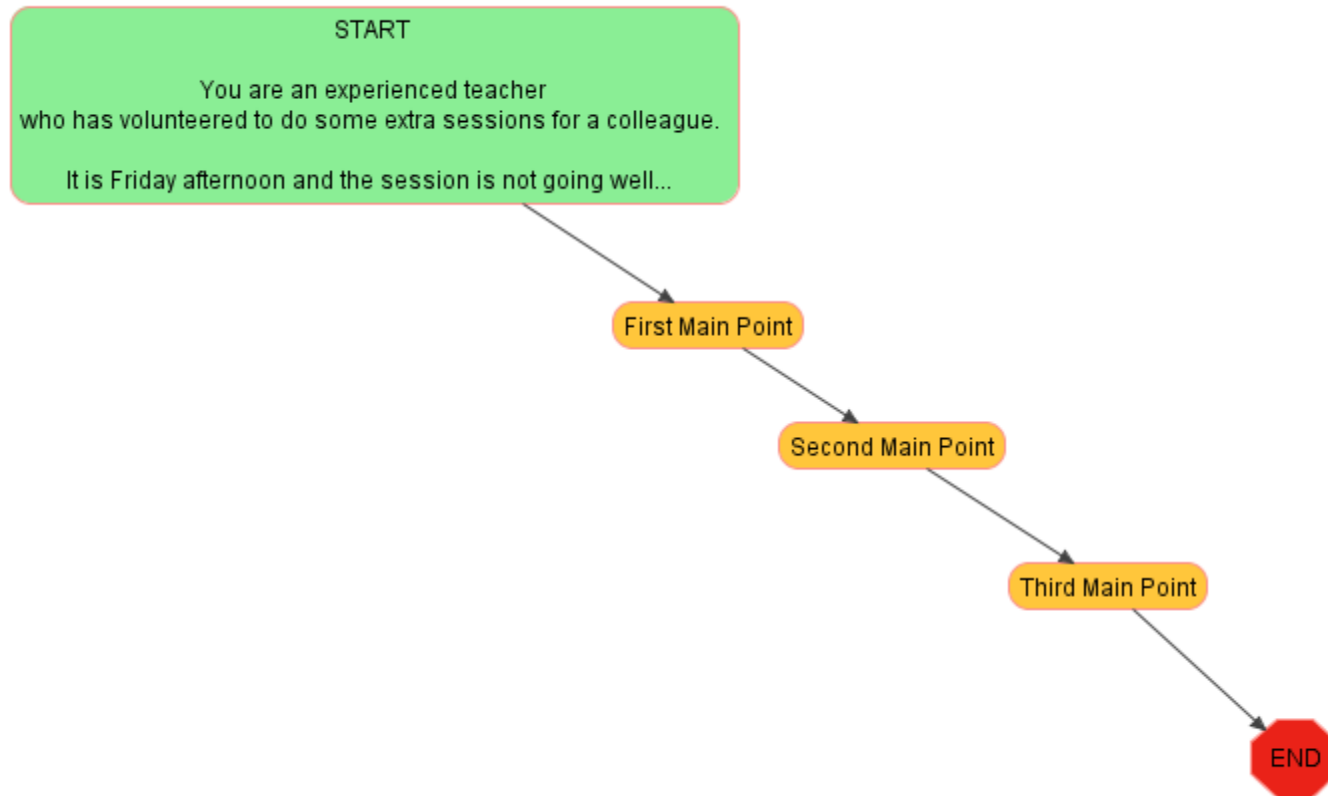
# Case examples

- VP on VPs
  - <http://vp.openlabyrinth.ca/renderLabyrinth/index/49>
- Careers board game
  - <http://vp.openlabyrinth.ca/renderLabyrinth/index/45>
- Street Drug Guide
  - <http://vp.openlabyrinth.ca/renderLabyrinth/index/37>

# Using a concept mapper

- <http://vue.tufts.edu/>
  - Free flexible concept mapping tool
- <http://demo.openlabyrinth.ca/>
  - Built-in Visual Editor

# Define the Design





Your first - KISS



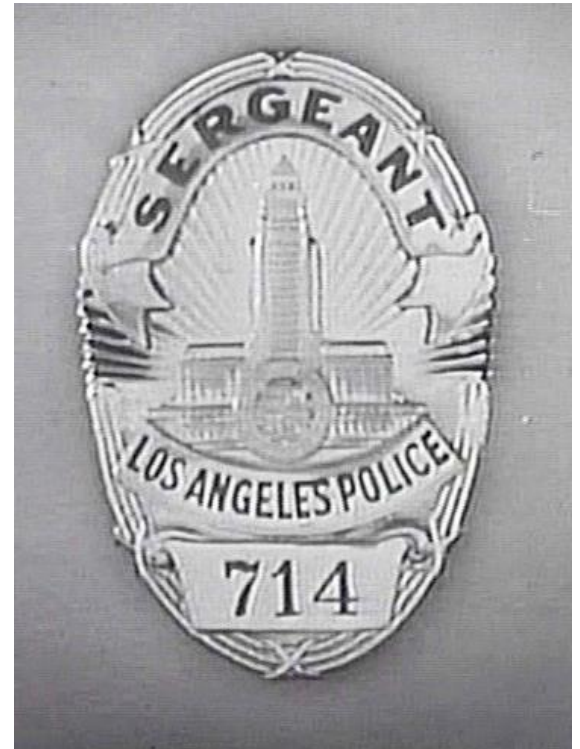
~~Uncle Sam~~ needs you!  
YOUR PATIENT



Second person narrative style

# Discover the facts

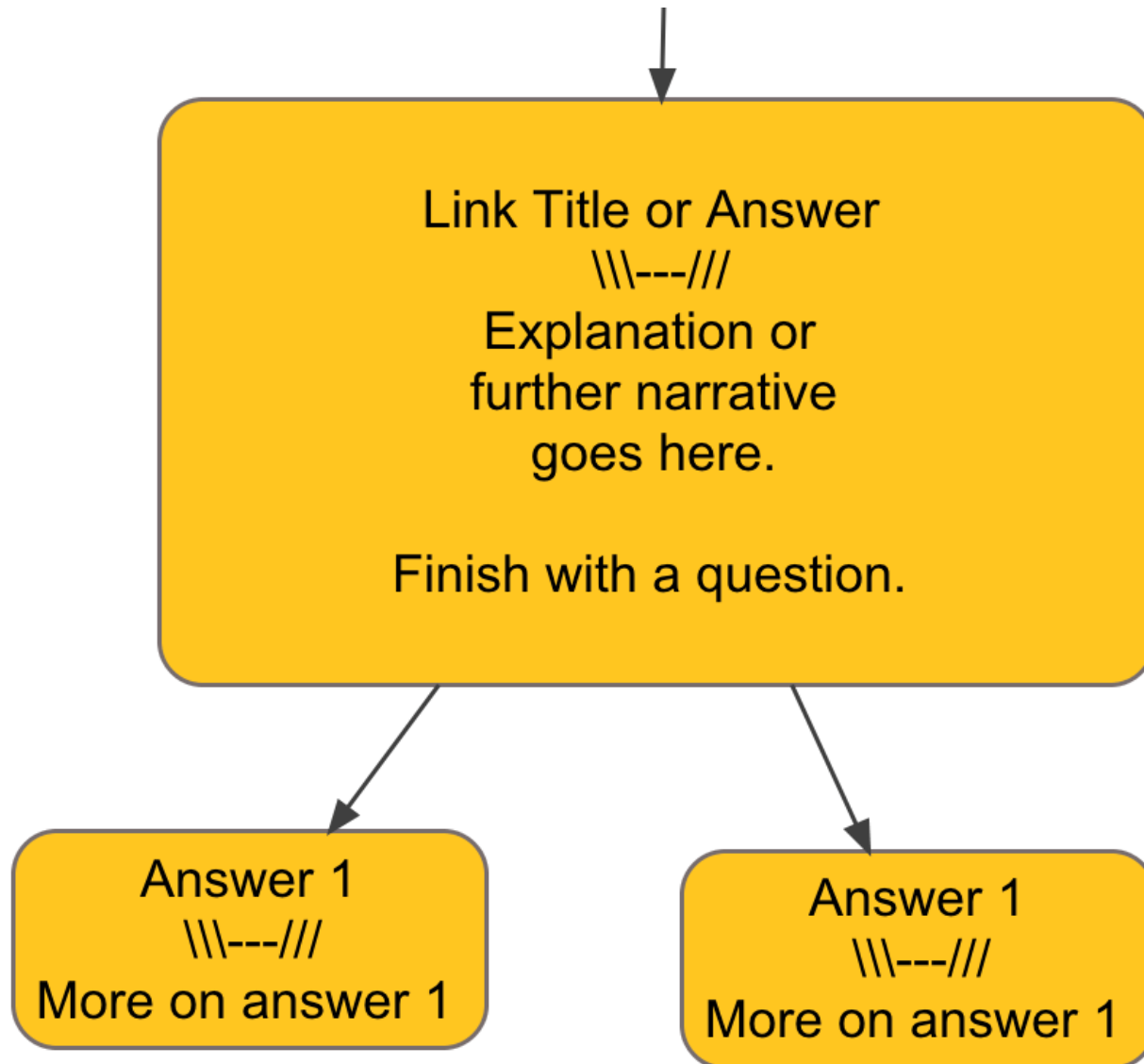
- Just the facts, ma'am
- Don't hand it to them on a plate



# Working with OpenLabyrinth

- Create a case
- Visual editor
- Node editor
- HTML editing
- Images
- Avatars

# Layout of a node



# Key design points - reprise

- Have you defined your main learning points?
- Do you have a story to tell?
- Have you made them think?

Next steps

# What do I need?

- Web browser
- Tech help or a teenager
- Access to an OpenLabyrinth server
  - <http://demo.openlabyrinth.ca/>
  - All are free
    - (except for the teenager!)



# Further resources

- OpenLabyrinth web site
  - <http://openlabyrinth.ca>
- Virtual Patient on Virtual Patients
  - <http://demo.openlabyrinth.ca/renderLabyrinth/index/49>
- Making a gin and tonic
  - <http://demo.openlabyrinth.ca/renderLabyrinth/index/89>