Lesson 6: The Big Squeeze: Pressure, Achievement and Burnout

Overview

This model illustrates a workaholic situation where pressure is entirely internally generated through increasing one's own expectations for oneself. Overachievers can understand how setting the bar ever higher can be unhealthy behavior over the long-term even though they have been successful with this strategy so far in life.

Learning Goals:

- Represent and interpret data on a line graph.
- Explore possible causes of burnout and identify potential leverage for prevention.
- Give advice to peers, based on an understanding of causes of burnout and leverage points.
- Self-assess, reflect, and make a personal plan.

Figure 1: Title Screen

Student Challenge

While working as a volunteer peer advisor at school, give advice to peers who are experiencing burnout cycles based on evidence from the simulation.

Lesson 6 – Level C – Ages 13+
Time: 3-4 periods

Materials:

- One computer for every 2-3 students
- Simulation online at http://www.clexchange.org/curriculum/complexsystems/oscillation/oscillation_burnoutC.asp
- Handouts (See pages 4-22)

Curricular Connections:

- Math: Vary assumptions, explore consequences, and compare predictions with data.*
- Science: Feedback mechanisms, motivation of organisms
- Social Studies: Individual development and identity

*Common Core Standards

Key system dynamics concepts and insights:

- Being overly driven by accomplishments can set the stage for burnout.
- Inadequate achievement (real or perceived) creates pressure on individuals.
- The body system can break down; prolonged exposure to stress can hinder achievement of goals, adding to even more stress.
- A person can accomplish more in the long-term by limiting what he does in the short-term.

Lesson Details

Preparation:

1. Create groups of two to three students each.
2. Check computers to make sure you can access the online simulation.
3. Copy each handout double-sided for each student. See the chart below to determine how many copies of each handout you'll need.

#	Page	Handout	Description
1	5-7	Introduction	This section includes instructions for assembling a learning portfolio and an assessment rubric. Students then get started on the simulation using step-by-step directions.
2	8-18	Exploration, Peers, and Self	Students explore the settings and results of the simulation. They then start "coaching" students in various situations.
3	19-21	Debrief	Students step through the debrief and write their reflections.
4	22-23	Recommendation	Students create a final analysis of the data, make recommendations, and write a summary for the head advisor.

4. *Optional*: You may want to read the background information about the underlying structure of the model. This can be useful as you guide students to understanding the model behavior as it relates to real-world behaviors and the limitations of the model. See "Burnout Model Background Info," available as a separate file for download.

Lesson Sequence:

1. Introduce students to any specific content knowledge related to burnout that you'd like students to have prior to running the simulation. This may include definitions of terms such as burnout, gaps (between desired accomplishments, perceived accomplishments, and actual accomplishments), internal and external pressures, tradeoffs, and workaholism.
2. Have students open the simulation and work through the simulation introduction, runs, and debrief using the guided handouts. Note that the handouts guide students through the simulation in a step-by-step manner. If you'd like to leave the exploration more open, then you may wish to eliminate some of the handouts. Figure 2 shows the control panel screen.

Lesson Details

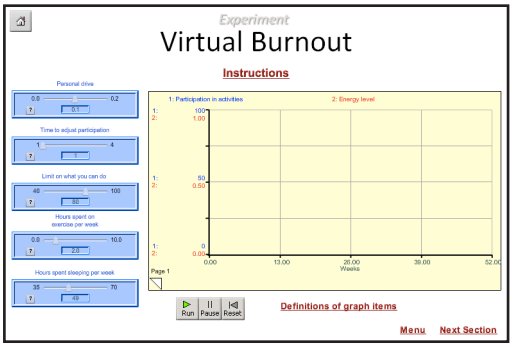


Figure 2: Control Panel

Debrief and Assessment:

1. Using the instructions and rubric, have students assemble their portfolios and write up their recommendations and summary.
2. One option is to ask students to present their recommendations orally within small groups or in front of the class. Peers could ask questions and give feedback to one another using aspects of the same rubric.
3. Debrief the simulation experience as a class using ideas for bringing the lesson home.

Bringing the Lesson Home:

Discuss these and any other questions/topics that surface about model behaviors.

- Discuss the three categories of typical causes presented in the simulation – work-related causes, lifestyle causes and personality traits.
- What is a situation in which you've felt "burned out?" What happened and why as a result? What, if anything, in this simulation could relate to your example?
- What would you consider to be more important to preventing burnout – making changes to one's schedule (doing less) or trying to control one's expectations of what can be accomplished (expecting less)? Why?
- Do you think people in different countries experience burnout at different rates and/or for different reasons? Why or why not?
- What other factors not included in the model could be at work in creating burnout?

Assessment Ideas:

Using a rubric, students assemble a portfolio of their learning. The portfolio includes a report to the head advisor.

The Big Squeeze: Pressure, Achievement and Burnout

You are volunteering as a peer coach in your school. Part of your new role is to listen to students who are having trouble keeping their lives in balance because they are either taking on too much work or not enough work. In preparation for taking on this role, you will run a simulation to determine how different policies play out over time. You'll explore the sections (in bold) as indicated. Remember, you can always revisit a section anytime you like.

After finishing your first day on the job, you will write up a recommendation to the head advisor, Mrs. Darcy, explaining your plan and your rationale for choosing it. The advisor will score your recommendation and portfolio with a rubric (see next page).

At the conclusion of this project, you will need the following elements organized into a portfolio.

1. Title page that incorporates the following:
    - Title: The Big Squeeze: Pressure, Achievement and Burnout
    - Your name
    - One or more drawings, illustrations, and/or diagrams that illustrate life choices related to school, work, and play. You can create a collage, drawing, or other representation to show the parts of the system and how they are connected.
2. Your report to Mrs. Darcy, documenting the following:
    - Students you met with and advice you gave
    - Summary page with key learnings and general conclusions (with evidence)
3. Handouts 1-3, complete and organized neatly in order
    - Handout 1 – Instructions, Rubric, and Introduction
    - Handout 2 – Exploration, Peer Runs, and My Pattern
    - Handout 3 – Debrief

Project Assessment Rubric

	Novice	Basic	Proficient	Advanced
Title	Little to no visuals are included.	Visuals are included, but they are not clearly linked to the system.	Visual representations clearly show key aspects of the system.	In addition, a diagram clearly shows cause-and-effect relationships.
Data (within the simulation handouts and in the recommendation)	Little to no data is included.	Some data is included, but it is not clear or accurately recorded.	The recorded data is relevant, accurate and clearly represented.	In addition to the data, the report describes logical connections between the data and conclusions.
Explanations (within the simulation handouts and in the recommendation)	Little to no explanation of the data is included.	Some explanation of the data is included, but it includes little detail and has some inaccuracies.	Explanations are clear and directly linked to the data on the graphs.	In addition, explanations describe trends and inter-connections.
Recommendations (RECs) and Rationale	RECs are missing or unclear.	RECs are present but not clearly linked to the data analysis.	RECs are clearly linked to the data analysis.	In addition, RECs include subtleties that are not explicitly shown in the data, but are inferred from the data.
Summary and Conclusions	Summary and/or conclusions are missing.	Summary is included but is unclear or inaccurate.	Data and recommendations are brought together into a concise summary.	In addition, the summary includes a rationale for why certain choices best prevent burnout cycles.

Introduction
Open web address: http://www.clexchange.org/curriculum/complexsystems/oscillation/
Select **The Big Squeeze: Pressure, Achievement and Burnout-Level C** simulation and **click**, "Start."
Click 1. Introduction – Burnout Dynamics.
Read the introduction and **click** on the pictures.

a. In your own words, what is burnout?

b. What causes burnout?

c. What does it mean to be a peer coach in the simulation?

d. Give one example of "activity" as defined in the simulation.

e. What is an activity that is not included in the definition?

Click Menu.
Click 2. Experiment with the Model.
Click the question marks (**?**) on the slidebars and write definitions in your own words.

Personal drive:

Time to adjust participation:

Limit on what you can do:

Hours spent on exercise per week:

Hours spent on sleeping per week:

Lesson 6 - Handout 2

The Big Squeeze: Pressure, Achievement and Burnout – Exploration

Do several runs with different settings. Just experiment and see what you can discover about what happens with different settings. When you feel that you know enough to give your peers some advice, write a summary of your learning below and proceed to your first peer coaching meeting. Make sure to include what causes the ups and downs of burnout in the simulation.

What I've learned so far:

Peer Coaching Schedule:
Peer #1 – Raven
Peer #2 – Sammy
Peer #3 – Evelyn
Peer #4 – Oxford
Reflection: My Pattern

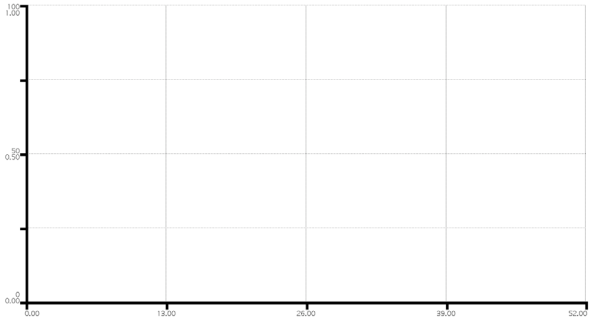
Peer #1 – Raven:
Raven is an extremely ambitious student. She will be the first person in her family to attend college, and both she and everyone around her have very high expectations. Because of her drive to do more and more no matter what, she has been having some problems keeping promises over the last year. Her family is very worried because she's always stayed on top of responsibilities in the past.

Set the simulation as shown below and then run.

Slider	Setting
Personal drive	0.2 (very high)
Time to adjust participation	1 week
Limit on what you can do	90 hours/week
Hours spent on exercise per week	2 hours/week
Hours spent sleeping per week	35 hours/week

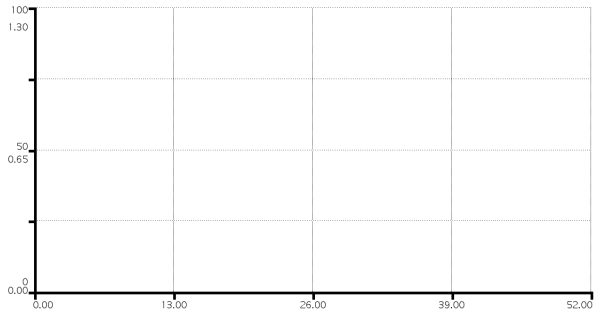
Record your results on the graphs below. Make sure to create labels and a key for each graph. Note that you'll need to click the bottom-left corner of the graph to see Page 2.

Participation in activities and Energy level



What is happening in the graphs and why?

Accomplishments per week, Desired accomplishments per week, and Satisfaction with accomplishments



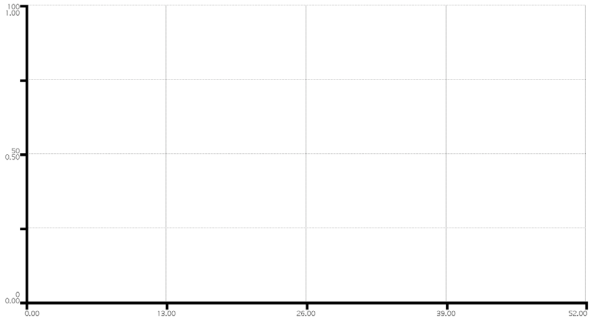
Peer #1 (continued):

a. Why do you think Raven is experiencing cycles of burnout?

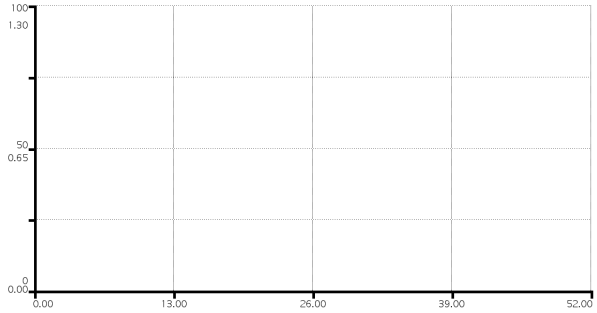
b. Raven wants to stop the cycles, but she still wants to achieve a lot. What are some ideas that would help her stop the crazy ups and downs while still keeping accomplishments high?

Continue running the simulation, trying different plans for Raven. Record the graphs for your best run below.

Participation in activities and Energy level



Accomplishments per week, Desired accomplishments per week, and Satisfaction with accomplishments



c. What are the new settings?

Slider	Setting
Personal drive	
Time to adjust participation	
Limit on what you can do	
Hours spent on exercise per week	
Hours spent sleeping per week	

d. What changes would Raven really need to make in her life in order to accomplish this?

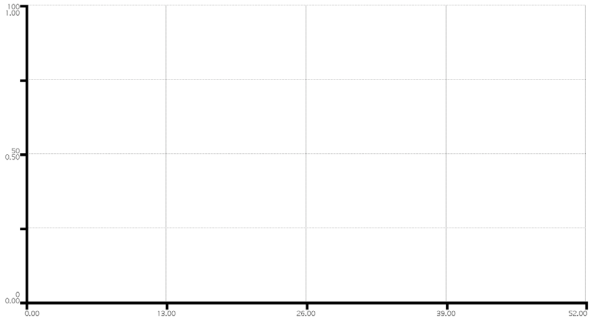
Peer #2 – Sammy:
Sammy has high drive, but he also finds time to exercise, and he gets plenty of sleep. His goal is to make the next Olympics team in gymnastics. Unfortunately, he still has times of exhaustion. This causes him to lose interest in working so hard; he stops showing up for practice and is also having trouble keeping up in school.

Set the simulation as shown below and then run.

Slider	Setting
Personal drive	0.2 (very high)
Time to adjust participation	1 week
Limit on what you can do	100 hours/week
Hours spent on exercise per week	10 hours/week
Hours spent sleeping per week	60 hours/week

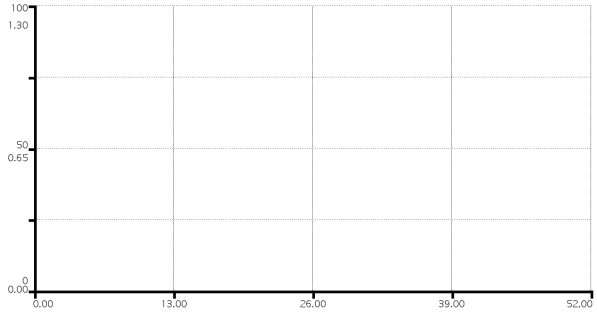
Record your results on the graphs below. Make sure to create labels and a key for each graph. Note that you'll need to click the bottom-left corner of the graph to see Page 2.

Participation in activities and Energy level



What is happening in the graphs and why?

Accomplishments per week, Desired accomplishments per week, and Satisfaction with accomplishments



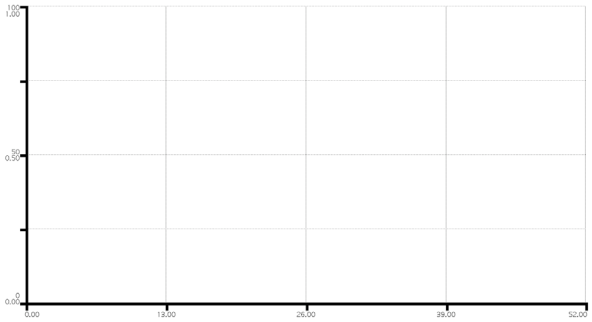
Peer #2 (continued):

a. Why do you think Sammy is experiencing cycles of burnout?

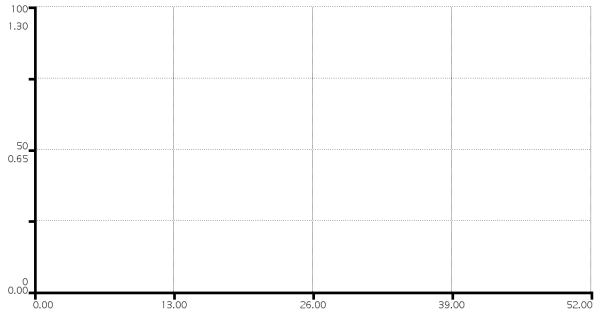
b. Sammy wants to stop the cycles, but he still wants to make the team. What are some ideas that would help him stop the crazy ups and downs, while still keeping his chances high for making the Olympics team?

Continue running the simulation, trying different plans for Sammy. Record the graphs for your best run below.

Participation in activities and Energy level



Accomplishments per week, Desired accomplishments per week, and Satisfaction with accomplishments



c. What are the new settings?

Slider	Setting
Personal drive	
Time to adjust participation	
Limit on what you can do	
Hours spent on exercise per week	
Hours spent sleeping per week	

d. What changes would Sammy really need to make in his life in order to accomplish this?

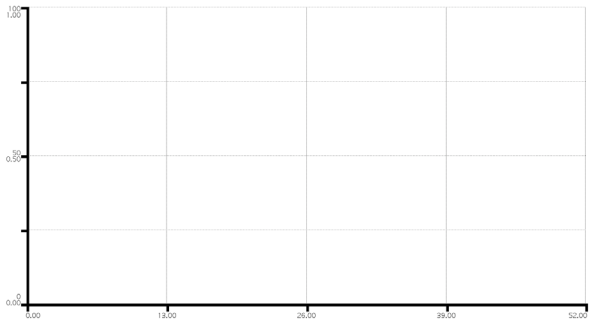
Peer #3 – Evelyn:
Evelyn has some drive and she has a hard time saying no to other people's requests. Because of this, her participation limit is high. She doesn't find the time to exercise because she is always doing tasks for other people.

Set the simulation as shown below and then run.

Slider	Setting
Personal drive	0.1 (some)
Time to adjust participation	1 week
Limit on what you can do	80 hours/week
Hours spent on exercise per week	0 hours/week
Hours spent sleeping per week	40 hours/week

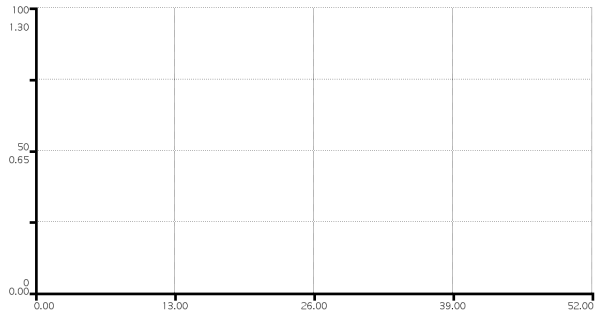
Record your results on the graphs below. Make sure to create labels and a key for each graph. Note that you'll need to click the bottom-left corner of the graph to see Page 2.

Participation in activities and Energy level



What is happening in the graphs and why?

Accomplishments per week, Desired accomplishments per week, and Satisfaction with accomplishments



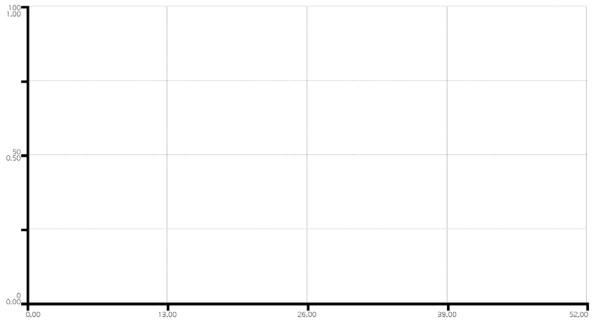
Peer #3 (continued):

a. Why do you think Evelyn is experiencing cycles of burnout?

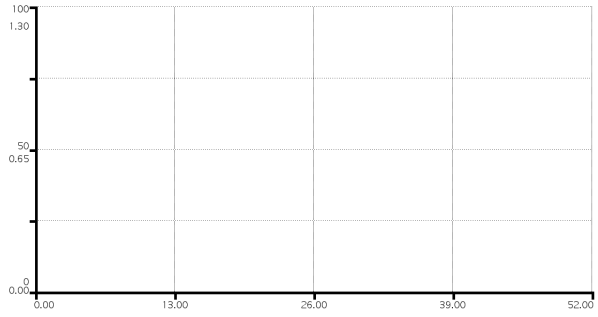
b. Evelyn wants to stop the cycles, but she still wants to achieve a lot. What are some ideas that would help her stop the crazy ups and downs, while still letting her help out others from time to time?

Continue running the simulation, trying different plans for Evelyn. Record the graphs for your best run below.

Participation in activities and Energy level



Accomplishments per week, Desired accomplishments per week, and Satisfaction with accomplishments



c. What are the new settings?

Slider	Setting
Personal drive	
Time to adjust participation	
Limit on what you can do	
Hours spent on exercise per week	
Hours spent sleeping per week	

d. What changes would Evelyn really need to make in her life in order to accomplish this?

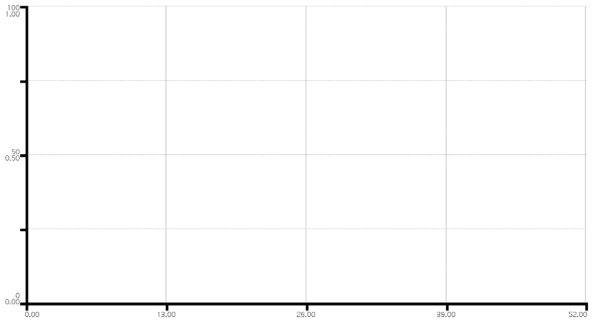
Peer #4 – Oxford:
Oxford has no drive at the moment. He wants to do more than he's currently doing, but he could use some advice. He does not want to turn his life into "Work, Work, Work!" He's seen what has happened to some of his friends; it seems to him they have no life.

Set the simulation as shown below and then run.

Slider	Setting
Personal drive	0 (none)
Time to adjust participation	1 week
Limit on what you can do	40 hours/week
Hours spent on exercise per week	5 hours/week
Hours spent sleeping per week	70 hours/week

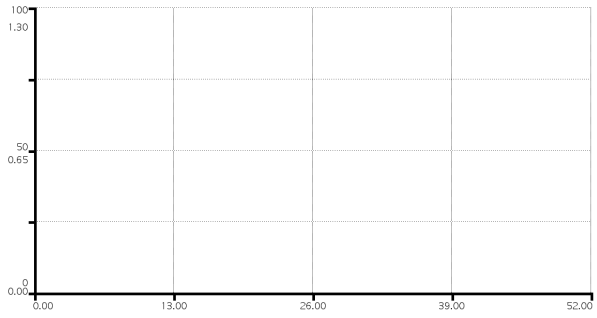
Record your results on the graphs below. Make sure to create labels and a key for each graph. Note that you'll need to click the bottom-left corner of the graph to see Page 2.

Participation in activities and Energy level



What is happening in the graphs and why?

Accomplishments per week, Desired accomplishments per week, and Satisfaction with accomplishments



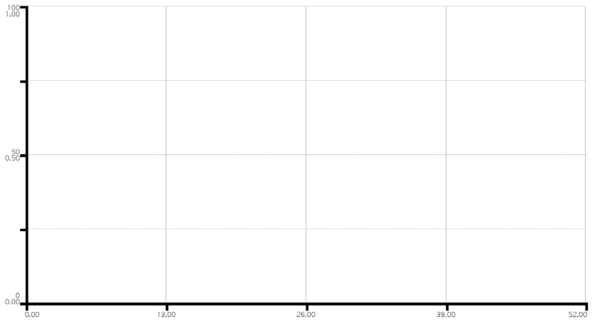
Peer #4 (continued):

a. Why do you think Oxford is not experiencing cycles of burnout?

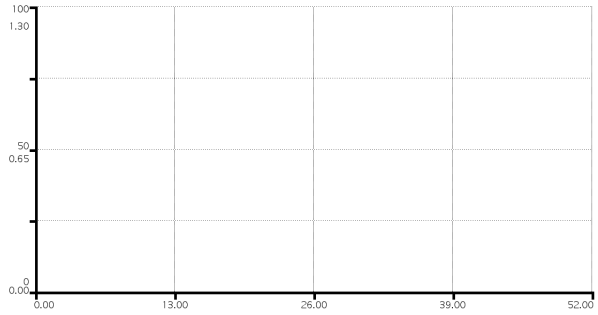
b. Oxford want to increase his accomplishments, but not by exhausting himself. What are some ideas that would help him increase success while still preventing burnout cycles?

Continue running the simulation, trying different plans for Oxford. Record the graphs for your best run below.

Participation in activities and Energy level



Accomplishments per week, Desired accomplishments per week, and Satisfaction with accomplishments



c. What are the new settings?

Slider	Setting
Personal drive	
Time to adjust participation	
Limit on what you can do	
Hours spent on exercise per week	
Hours spent sleeping per week	

d. What changes would Oxford really need to make in his life in order to accomplish this?

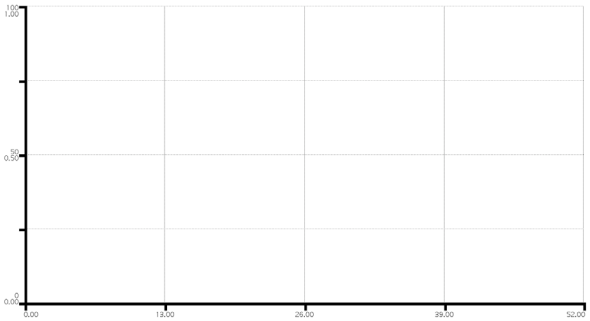
My Pattern:
What's your story?

Set the simulation based on your story and record the settings.

Slider	Setting
Personal drive	
Time to adjust participation	week(s)
Limit on what you can do	hours/week
Hours spent on exercise per week	hours/week
Hours spent sleeping per week	hours/week

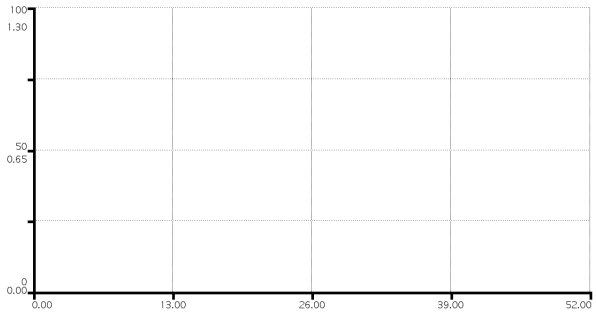
Record your results on the graphs below. Make sure to create labels and a key for each graph. Note that you'll need to click the bottom-left corner of the graph to see Page 2.

Participation in activities and Energy level



What is happening in the graphs and why?

Accomplishments per week, Desired accomplishments per week, and Satisfaction with accomplishments



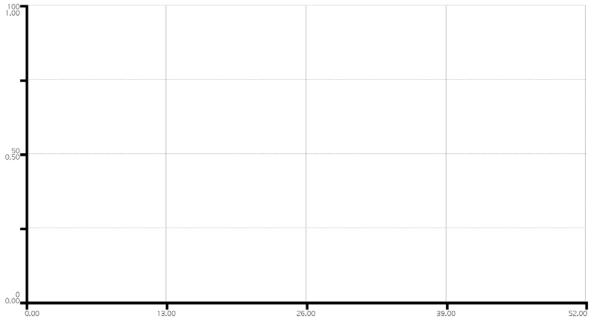
My Pattern (continued):

a. What's happening on your graphs? Are cycles of burnout happening?

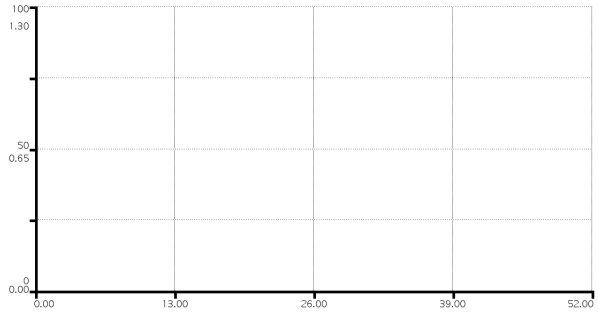
b. How accurate are the graphs in comparison to what's really happening in your life?

c. What, if any, changes would you like to see? If none, please explain why. Try some different ideas using the simulation and then record your favorite run below.

Participation in activities and Energy level



Accomplishments per week, Desired accomplishments per week, and Satisfaction with accomplishments



d. What were the new settings?

Slider	Setting
Personal drive	
Time to adjust participation	
Limit on what you can do	
Hours spent on exercise per week	
Hours spent sleeping per week	

e. What changes would you really need to make in your life in order to accomplish this?

Debrief
Click Menu.
Click 3. Debrief Central. You'll go through each of these sections of the debrief to process what you experienced in the simulation.

Click A. Behavior Patterns.
Read "The Classic Case" and click What's really happening.

a. When does satisfaction first start to decrease significantly?

b. Why is this happening? Use the graphs to explain your answer.

c. If you are dissatisfied with your progress, (learning something new, doing well in a sport, e.g.), does that boost your energy or sap it?

d. Why isn't this an ideal situation for the mental and physical health of the person?

Continue by clicking Back to "The Classic Case" and then Continue.
Read through each of the other four scenarios and then answer the following:

e. Which scenario best slows down the burnout cycles? Why?

f. Which scenario would you select as the best option for a person who wants to achieve a lot, but who also wants to avoid burnout? Why?

g. How might having a big difference (gap) between what people want to accomplish and what is actually accomplished affect their beliefs about themselves?

h. Which pattern is closest to your own? In what way?

Debrief (continued)
Click Menu and **B. Explore the Model.**
Look at the simplified map of the system.

a. How do the three main parts (participation, energy, and accomplishments) affect one another?

Click Tour the Model Structure – Parts 1 and 2. Use the space bar to see one piece added at a time.

b. Looking at the map of the system, fill in the following table.

Stock	What increases the stock?	What decreases the stock?	How does this stock affect another stock(s)?
Participation in activities			
Energy level			
Desired accomplish-ments			

Debrief (continued)

Click Tour the Loops. **Click** on the B (Balancing) symbols for the explanations. **Click "**More Loops" and read through the explanations of the R (Reinforcing) symbols.

a. Choose one of the loops, draw it here, and "tell the story" of that loop in your own words.

b. How does that loop relate to the behaviors you saw in the simulation?

From "More Loops," **Click** "Back" twice to get to the Debrief Menu and then **click** on **C. Connections.**

a. What three categories relate to the causes of burnout?

b. Which category most strongly relates to your own pattern? In what way?

c. In your own life, what gives you balance? What steps do you take to deal with stress?

DAILY REPORT

DATE:

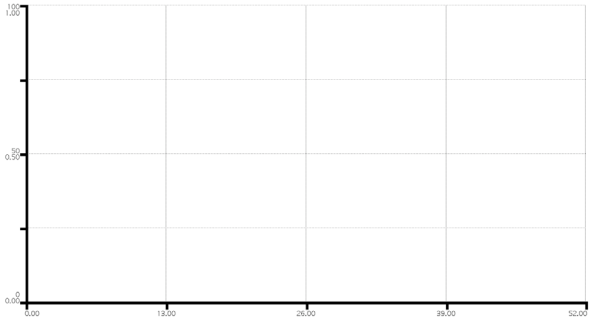
TO: **Mrs. Darcy, Head Advisor**

FROM:

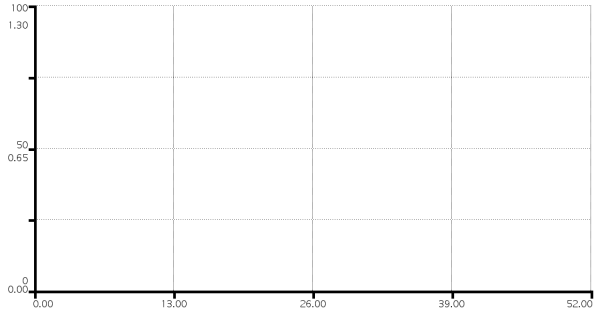
REGARDING: **Peer Coaching Session Report**

Actions in the simulation that best led to high accomplishments, high satisfaction and low burnout issues (copy your best settings/graphs and explain why):

Participation in activities and Energy level



Accomplishments per week, Desired accomplishments per week, and Satisfaction with accomplishments



Settings:

Slider	Setting
Personal drive	
Time to adjust participation	
Limit on what you can do	
Hours spent on exercise per week	
Hours spent sleeping per week	

Why did this work?

Log of Peer Coaching Sessions:

Student	**Recommendations**	**Rationale** (Include proof and examples.)
Student #1 – Raven		
Student #2 – Sammy		
Student #3 – Evelyn		
Student #4 – Oxford		

Summary and General Conclusions: (see attached)

Acknowledgements:
Lesson 6 - Level C
The Big Squeeze: Pressure, Achievement and Burnout
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