Resources for Lesson Planning

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<u>An Addendum to the Video:</u> "What do I need to know about lesson planning: Preschool through high school"

Summary of the K-12 Core Curriculum Standards (1/05) Based on the N.J. State Department of Education Website: www.nj.gov/njded/cccs

1. Visual and Performing Arts – K-12

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1.1	Aesthetics	1.2 Creation and Pe	erformance	1.3 Elements and		1.4 Critque	1.5 World Cultures, History,
	A. Knowledge	A. Dance	C. Theater	A. Dance	C. Theater	A. Knowledge	A. Knowledge
	B. Skills	B. Music	D. Visual Art	B. Music	D. Visual Art	B. Skills	B. Skills
2.	Health and Physical Educati	<u>on – K-12</u>					
2.1	Health Promotion and Diseas	se Prevention	2.3 Alcoho	l, Tobacco, and Othe	er Drugs	2.5 Learning a	and Applying Movement Concepts & Skills
	A. Personal Health and Wellne	ess	A. Drug	s and Medicines		A. Movem	ent Skills
	B. Growth and Development		B. Toba	acco		B. Movem	ent Concepts
	C. Nutrition		C. Alco	hol		C. Strateg	у
	D. Disease Prevention		D. Inha	lants		D. Sportma	anship
	E. Injury Prevention and Safet	у	E. Othe	er Drug Classifications		E. Rules a	nd Safety
	F. Mental Health		F. Depe	endency/Addiction and	d Treatment	F. Sport P	sychology
				ring Drug-Free			
2.2	Health-Enhancing Personal,	Interpersonal and Life	e Skills H. Med	ia and Marketing			
	A. Communicating About Well	ness					
	B. Making Decisions About We	ellness	2.4 Human	Sexuality and Family	y Life	2.6 Learning a	Ind Applying Fitness Concepts & Skills
	C. Planning and Goal Setting	for Wellness	A. Preg	nancy and Childbirth		A. Fitness	and Exercise
	D. Developing Health Leaders	hip Skills	B. Fam	ilies and Parenthood		B. Training]
	E. Health Advocacy and Servi	се	C. Frier	ndship and Dating		C. Achievi	ng and Assessing Fitness
	F. Health Services and Career	ſS	D. Sexu	ual Health			
3.	Language Arts Literacy - K-	12					
3.1	Reading		3.2 Writing			3.4 Listening	
	A. Concepts about print		A. Writi	ng as a Process		A. Active L	istening
	B. Phonological Awareness		B. Writi	ng as a Product		B. Listenin	g Comprehension
	C. Decoding and Word Recog	gnition	C. Mec	hanics, Spelling, and I	Handwriting		
	D. Fluency		D. Writi	ng Forms, Audiences	and Purposes		
	E. Reading Strategies (before	, during, and after read	ling)	-			
	F. Vocabulary and Concept D	evelopment	3.3 Speakir	ng		3.5 Viewing ar	nd Media Literacy
	G. Comprehension Skills and		A. Disc	ussion			cting Meaning
	H. Inquiry and Research	-	B. Que	stioning (Inquiry) and	Contributing	B. Visual a	nd Verbal messages
				d Choice	-	C. Living w	vith Media

Mathematics – K-12 4.

4.1 Number & Numerical Operations

- A. Number Sense B. Numerical Operations
- C. Estimation
- 4.2 Geometry & Measurement
 - A. Geometric Properties
 - B. Transforming Shapes
 - C. Coordinate Geometry D. Units of Measurement
 - E. Measuring Geometric
 - Objects

4.3 Patterns & Algebra

D. Oral Presentation

- A. Patterns and
- Relationships
- B. Functions. C. Modeling
- D. Procedures

4.4 Data Analysis, Probability, and **Discrete Mathematics**

- D. Discrete Mathematics Vertex-Edge Graphs &
 - Algorithms

4.5 Mathematical Processes

- A. Problem Solving
- B. Communication
- C. Connections
- D. Reasoning
- E. Representations
- F. Technology

- A. Data Analysis (Statistics)
- B. Probability
- C. Discrete Mathematics Systematic Listing & Counting

5. Science- K-12

5.1 Scientific Processes

- A. Habits of Mind
- B. Inquiry and Problem Solving
- C. Safety
- 5.2 Science and Society
 - A. Cultural Contributions
 - **B.** Historical Perspectives

Social Studies- K-12 4.

6.1 Social Studies Skills: Utilize Historical Thinking, Problem Solving, Research Skills (Time Lines, critical thinking)

6.2 Civics

- A. Civic Life. Politics & Government
- B. American Values & Principles
- C. The Constitution and the American Democracy
- D. Citizenship
- E. International Education: Global Challenges, Cultures, and Connections

7. World Languages-K-12

7.1 Communcation

A. Interpretive Mode

- C. Presentational Mode B. Interpersonal Mode
- 8. Technological Literacy—K-12

8.1 Computer and Information Literacy-K12

A. Basic Computer Tools and Skills

- B. Application of Productivity Tools
 - Social Aspects ٠
 - Information Access and Research .
 - Problem Solving and Decision Making

Career Education-K-12 9.

9.1 Career and Technical Education

A. Career Awareness and Planning

B. Employability Skills

- 5.3 Mathematical Applications A. Numerical Operations B. Geometry and Measurement
 - C. Patterns and Algebra D. Data Analysis and Probability

and Discrete Mathematics

- 5.4 Nature and Process of
 - A. Science and Technology
 - B. Nature of Technology
 - C. Technological Design

6.3 World History

A. Birth of Civilization to 1000 (BC) B. Early Human Societies to 500 CE (AD) C. Expanding Zones of Exchange and Interaction D. The Age of Global Encounters (1400-1750) E. The Age of Revolutionary Change (1750-1914) F. The Era of the Great Wars (1914-1945) G. The Modern World (1945-1979) H. Looking to the Future (1980-Present)

5.5 Life Science

E. Heredity

A. Flow of Matter & Energy

B. Structure & Function

C. Diversity & Similarity

5.6 Physical Science-Chemistry

C. Conservation of Matter

A. Atoms & Molecules

B. Chemical Reactions

D. States of Matter

D. Evolution of Life

7.2 Culture

- B. Interpersonal Mode
 - C. Presentational Mode

8.2 Technology Education

- A. Nature and Impact of Technology
- B. Design Process and Impact Assessment
- C. Systems in the Designed World

9.2 Consumer, Family, and Life Skills

- A. Critical Thinking
- B. Self-Management
- C. Interpersonal Communication
- D. Character Development & Ethics
- E. Consumer & Personal Finance
- F. Safety

5.9 Physical Science -Astronomy

- A. Earth, Moon, Sun System
- B. Galaxies & Universe
- C. Stars
- D. Solar System

5.10 Environmental Studies

- A. Natural Interactions
- B. Human Interactions

6.5 Economics

A. Economic Literacy B. Economics & Society

6.6 Geography

- A. The world in Spatial terms
- B. Places & regions
- C. Physical systems
- D. Human systems
- E. Environment & society

A. Interpretive Mode

L. Contemporary America (1968-present)

5.7 Physical Science-Physics

C. Energy Transformations

5.8 Physical Science -Earth Science

B. Atmosphere and Weather

6.4 United States/New Jersey History

A. Family and Community Life

C. Many Worlds Meet (to 1620)

K. Postwar Years (1945-1970)

D. Colonization & Settlement (1585-1763)

F. Expansion & Reform (1801-1861)

E. Revolution & the New Nation (1754-1820)

G. Civil War and Reconstruction (1850-1877)

I. Emergence of Modern America (1890-1930)

J. The Great Depression & WWII (1929-1945)

H. The Industrial Revolution (1870-1900)

B. State and Nation

A. Earth's Properties and Materials

C. Processes that Shape the Earth D. How We Study the Earth

A. Motion

B. Forces

Examples of Cumulative Progress Indicators: K-12

Sample K-12 Visual & Performing Arts CPI's

- K-2 1.2D1: Use basic elements of color.
- 3-4 1.3B1: Explore musical elements.



- 5-6 1.3B2: Use basic concepts of <u>meter and rhythm</u>.
- 9-12 1.5A1: Summarize how art forms preserve <u>cultural heritage</u>.

Sample K-12 LA CPI's

- K: LA 3.2A7 Sequences story events using pictures.
- 2: LA 3.2A4: Writes sentences to convey ideas.
- 3: <u>LA3.1G2</u>: Identifies cause/effect, fact/opinion, <u>main</u> <u>idea/support details</u> in interpreting texts.
- 4: <u>LA3.1G7</u>: <u>Summarizes</u> central ideas in informational texts.
- 5: LA 3.1G9: Make <u>inferences</u> & find <u>supporting</u> evidence.
- MS: <u>LA 3.1G6</u>: Compares an <u>author's perspective</u>: character, setting or event.
- HS: <u>LA 3.2 B5:</u> Writes a range of <u>essays</u> across the curriculum: <u>persuasive</u>, or analytic.
- Sample K-12 Math CPI's
- K: Math 4.1A1 Demonstrates the use of ordinal math (first, second, etc.)
- 1: Math <u>4.1B5</u>: <u>Adds and subtracts</u> whole numbers to 10.
- 2: Math <u>4.2D1</u>: tells <u>time to the minute</u>, hour.
- 3: Math <u>4.1A1</u>: Uses <u>proper fractions</u> with denominators of 2,3,4,5,6,8,10)
- 4: Math <u>4.1B1</u>: <u>Adds and subtracts two and three digit numbers.</u>
- 5-8: Math <u>4.2D1</u>: Measure <u>angles</u>, area, volume.
- 9-12: Math <u>4.3 A3</u> Use <u>inductive reasoning</u> to form generalizations.

Sample K-12 Social Studies CPI's

- 2: SS <u>6.3A5</u>: Compares <u>family life</u> with long ago.
- 3: SS <u>6.1C2</u>: Describes three <u>branches</u> of the federal government.
- 4: SS <u>6.1C1</u> Describes three essential ideas in the <u>Constitution</u> and their importance
- 5-8: SS <u>6.3 B2</u>: Compares characteristics of places in <u>N.J.</u> and the U.S.
- 9-12: SS 6.4H1: Industrial Revolution

Sample K-12 World Languages CPI's



- 2: WL 7.1A1: Comprehends simple oral directions.
- 4: WL 7.2A1: Compares the daily practices of people in the target culture.
- 8: WL 7.1B4: Engages in short conversations.
- 12: WL 7.2A4: Compares products of the target culture.

Sample K-12 Science CPI's

- 1: Sci.: <u>5.8B4</u>: Describes how changes in <u>four</u> <u>seasons</u> affect weather.
- 2: <u>Sci. 5.8B3</u>: Describes patterns of <u>weather</u>.
- 3: Sci. <u>5.8B2</u> Diagrams the <u>water cycle</u> and describes evaporation, condensation, precipitation.
- 4: Sci. <u>5.9A1</u> Illustrates how the earth orbits the sun resulting in <u>seasonal patterns</u>.
- 5-8: Sci. <u>5.5B2</u>: Identifies and describes the function of <u>cells</u> and cell parts.
- 9-12: Sci. 5.10B2: Assesses environmental risks.

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Detailed Lesson Planning Template for a Teacher Led Lesson (For K-5, 5-8, K-12 and TSD)

Candid	ate Name:	School:	Grade:		
I. Su	bject Area(s):				
II. To	pic and Core Standard:				
III. Co	oncept:				
IV. Es	sential Question:				
V. Ob	V. Objectives/Student Learning Outcomes: (SWBAT): Students will be able to				
VI. Tea	cher Actions:				
	1. <u>Planning:</u>				
	2. <u>Motivate:</u>				
	<i>3</i> . <u>Teach:</u>				

- 4. Image:
- 5. <u>Ask</u> Low and High Level Questions:
- 6. Practice Skills:
- 7. <u>Create (Performance Task):</u>
- 8. <u>Student Presentations/Closure</u> (How will students share their performance task results?):
- 9. <u>Evaluation</u> (Show the Rubric used to evaluate the Performance Task):
- 10. Accommodations (How will you help students who struggle with the lesson?):
- 11. <u>Role of Auxiliary Personnel</u> (How will you use other adults in the lesson?):
- 12. Summary of Assessment Data (Results of the Rubric Evaluation):
- 13. <u>Family/Community</u> (How will you involve the families in the lesson?):
- 14. <u>Reflection/Self Evaluation</u> (How can you improve the lesson?):

Casey At the Bat by E. L. Thayer (1888)

The Outlook wasn't brilliant for the Mudville nine that day: The score stood four to two, with but one inning more to play. And then when Cooney died at first, and Barrows did the same, A sickly silence fell upon the patrons of the game.

A straggling few got up to go in deep despair. The rest Clung to that hope which springs eternal in the human breast; They thought, if only Casey could get but a whack at that -We'd put up even money, now, with Casey at the bat.

But Flynn preceded Casey, as did also Jimmy Blake, And the former was a lulu and the latter was a cake; So upon that stricken multitude grim melancholy sat, For there seemed but little chance of Casey's getting to the bat.

But Flynn let drive a single, to the wonderment of all, And Blake, the much despis-ed, tore the cover off the ball; And when the dust had lifted, and the men saw what had occurred, There was Jimmy safe at second and Flynn a-hugging third.

Then from 5,000 throats and more there rose a lusty yell; It rumbled through the valley, it rattled in the dell; It knocked upon the mountain and recoiled upon the flat, For Casey, mighty Casey, was advancing to the bat.

There was ease in Casey's manner as he stepped into his place; There was pride in Casey's bearing and a smile on Casey's face. And when, responding to the cheers, he lightly doffed his hat, No stranger in the crowd could doubt 'twas Casey at the bat.

Ten thousand eyes were on him as he rubbed his hands with dirt; Five thousand tongues applauded when he wiped them on his shirt. Then while the writhing pitcher ground the ball into his hip, Defiance gleamed in Casey's eye, a sneer curled Casey's lip.

And now the leather-covered sphere came hurtling through the air, And Casey stood a-watching it in haughty grandeur there. Close by the sturdy batsman the ball unheeded sped-"That ain't my style," said Casey. "Strike one," the umpire said.

From the benches, black with people, there went up a muffled roar, Like the beating of the storm-waves on a stern and distant shore. "Kill him! Kill the umpire!" shouted someone on the stand; And its likely they'd a-killed him had not Casey raised his hand. With a smile of Christian charity great Casey's visage shone; He stilled the rising tumult; he bade the game go on;

He signaled to the pitcher, and once more the spheroid flew; But Casey still ignored it, and the umpire said, "Strike two."

"Fraud!" cried the maddened thousands, and echo answered fraud; But one scornful look from Casey and the audience was awed. They saw his face grow stern and cold, they saw his muscles strain, And they knew that Casey wouldn't let that ball go by again.

The sneer is gone from Casey's lip, his teeth are clenched in hate; He pounds with cruel violence his bat upon the plate. And now the pitcher holds the ball, and now he lets it go, And now the air is shattered by the force of Casey's blow.

Oh, somewhere in this favored land the sun is shining bright; The band is playing somewhere, and somewhere hearts are light, And somewhere men are laughing, and somewhere children shout; But there is no joy in Mudville - mighty Casey has struck out.

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Short Lesson Plan Template for a Teacher Led Lesson (For K-5, 5-8, K-12 and TSD)

Car	ndidate Name:	School:	Grade:
I.	Subject Area(s):		
II.	Topic and Core Standard:		
III.	Concept:		
IV.	Essential Question:		

- V. Objectives/Student Learning Outcomes: (SWBAT): Students will be able to ...
- **VI.** Teacher Actions:
 - 1. Planning:
 - 2. <u>Motivate:</u>
 - 3. Teach:
 - 4. Image:
 - 5. <u>Ask</u> Low and High Level Questions:
 - 6. Practice Skills:
 - 7. <u>Create (Performance Task):</u>

Examples of Topics, Concepts &

Essential Questions: Math Topics K-12

Estimation (Primary)



- Addition of Whole Numbers (Primary)
- Measurement (Gr. 3-5)
- Area (Middle School)
- Probability (Middle-High School)
- Data Analysis (High School)

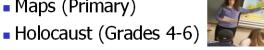
Science Topics (K-12)



- Weather (Primary)
- Matter (Grades 3-5)
- Rainforest (Middle School)
- Solar System (Middle School)
- Environment (Middle/High)
- Evolution (High School)

Social Studies Topics (K-12)

- Family and Community (Primary)
- Maps (Primary)



- American Revolution (Middle)
- Constitution (Middle)
- Great Depression (High School)
- Ancient Greece (High School)

How are Topics and Concepts

Different?	A Contraction
 <u>Concept</u> 	Topic
Power	Medieval Times (6.3D)
Trust	Data Analysis (4.4A3)
Growth	Plants (5.5A)
Equality	Democracy (6.2A3)
Exploration	Columbus (6.3E)
Location	Maps (6.7A)
Change	Four Seasons (5.9A)
Racism	Huckleberry Finn 4

High Level Concepts

- Change Ambition
- Courage Identity
- Conflict Relationships
- Equality Leadership
- Exploration Culture/Diversity
- Cruelty Survival
- Waterways Prejudice
- Protection Growth
- Adaptation Wellness
- Heroism Communication
- Invention Contributions
- Pollution Power
- Creativity Revolution

Essential Questions Create a Stimulating,

5

Community of Learners

Topic: Animal Habitats (Grade 2)

Concept: Survival

Concept: Contributions

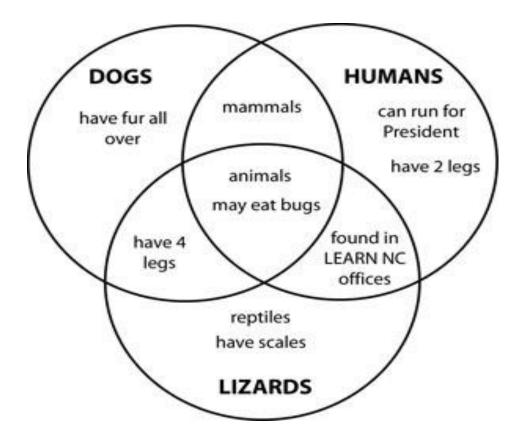
Essential Question: "How does an animal's habitat help it to survive?"

<u>Topic: Occupations</u> (Middle School)



- <u>Essential Question</u>: "What qualities does one need in order to change the world?"
- <u>Topics</u>: LA: Ethnic Authors; SS: Religions; Science: Plant Variation) (H.S.)
- Concept: <u>Diversity</u>
- Essential Question: Is Diversity a good thing? Why?

Visual Organizers: A Venn Diagram



Asking Questions Using Bloom's Taxonomy

- 1. <u>Knowledge (Recall)</u>: What causes the Indian River to be polluted?
- 2. <u>Comprehension (Describe)</u>: Why does Ella want to clean up the River?
- 3. <u>Application (Apply)</u>: How can you improve your environment?
- 4. <u>Analysis (Compare, Conclude)</u>: How are Ella's thoughts different from Ivan's? Similar?
- 5. <u>Synthesis</u> (Create, Predict, Solve): How can Ella and Ivan compromise?
- 6. <u>Evaluation</u> (Judge): Who has the stronger argument, Ella or Ivan? Why?

Critical Skills for Students to Practice

(Robert Marzano reports that direct instruction of vocabulary promotes a 33% improvement on tests.)

Low Level Thinking

- 1. Vocabulary and Definitions: (Grade 3: LA 3.3C3) (Grade 8: LA 3.1F2)
 - Strategies for Learning and Practicing <u>Vocabulary</u>:
 - "<u>Up and About</u>"
 - <u>Visual Images</u>: sketches show understanding of the word
 - <u>Games</u>: Bingo, Jeopardy, Word Baseball
 - <u>Crossword Puzzles</u>
 - <u>Decoding</u>: prefixes, suffixes, roots
 - <u>Organizer</u>: arrange under key concepts
 - <u>Total Physical Response (TPR)</u>: students act out words
 - <u>Use certain number of words in a writing assignment</u>
 - <u>Storytelling</u>
 - Metaphor: "How is democracy like baseball?
 - <u>Glossary:</u> list of words, definitions and pictures
- 2. Summarizing (Grade 3: 3.1G7) (Grade 8: SS 6.1A11)
- 3. Notetaking (LA 3.4B2)
- 4. **Revising** (LA 3.2A6 or 8)

High Level Thinking (94% of test items require higher order thinking)

- 5. Make inferences and find supporting evidence. (Fifth Grade: LA 3.1G9) (8th Grade: LA 3.1G7)
- 6. **Comparing** (LA 3.1G15) (SS 6.1A8)
- 7. Identify a problem—create a solution (LA 3.2B3)
- 8. Write to persuade (5th Grade: LA 3.2B2) (8th Grade: LA 3.2B4)
- 9. Asking questions (LA 3.4B2) (SS 6.1A6)

Examples of Performance Tasks: Pre-K to 12

Performance Task: An end of the unit task which is integrated and shows student understanding of content and skills found in the standards.

Performance Task Ideas

Create an "All About..." Book.

Create a "How to..." Book.

Write a letter to a friend.

Create an advertisement, "want ad" or travel brochure.

Write a play or a skit.

Draw a picture and dictate a sentence.

Construct (clay, legos, collage) a model.

Create a poster, newsletter or website.

Create a map for a purpose.

Write a comparison of similarities and differences within two books.

Write a new story based on two other sources.

Solve a problem: how to do it differently.

Create an experiment.

Interview, survey, graph and summarize data into a report

Compose and perform a song or poem.

Create a power point presentation or a web site.

Sample Performance Task and Rubric: 6th Grade: "Protecting Forests"

Pretend you are a city planner facing a difficult decision: should the city allow a building company to pay the city a lot of money in order to build apartment houses in a portion of a city-owned forest?

You are asked to <u>write and give a speech</u> before the city council, aired on local cable TV, in order to persuade the council and the citizens to your point of view, either for or against this decision. <u>Provide at least three arguments for or against allowing the apartments</u> to be built and acknowledge the main opposing argument. Be sure you clearly explain your arguments and use correct <u>vocabulary terms</u>, good grammar, spelling and complete sentences. (**CPI: Sci. 5.10B2**)

Sample Rubric for "Protecting Forests"

Grading Scale: Proficient =16; Satisfactory = 12-15; Emerging = 8-11; Needs Improvement: 4-10

Category	1 = Needs	2 = Emerging	3 = Satisfactory	4 = Proficient
	Improvement			
Content	Shows <u>no</u>	Shows a beginning	Shows some	Shows a <u>clear</u>
	understanding of	understanding of one	understanding of two	understanding of
	any arguments; no	or less arguments	or three arguments,	three arguments, with
	details of an	with little in details	with some details,	details, showing an
	opposing view.	of an opposing	showing an opposing	opposing view.
		view.	view.	
Opening	<u>No attempt</u> to	Beginning attempt to	An opening that	An opening that
	capture attention.	capture attention.	somewhat catches the	<u>clearly</u> catches the
			audience's attention.	audience's attention.
Mechanics	Poor understanding	Beginning	Some understanding	Clear understanding
	of grammar,	understanding of	of good usage of	of good usage of
	spelling, and	grammar, spelling,	grammar, spelling,	grammar, spelling,
	incomplete	punctuation, and	punctuation and	punctuation and
	sentences.	complete sentences.	complete sentences.	complete sentences.
Vocabulary	No understanding	Beginning	Some understanding	Clear understanding
Terms	of vocabulary terms	understanding of	of vocabulary terms as	of vocabulary terms
	as part of the	vocabulary terms as	part of the speech.	in the speech.
	speech.	part of the speech.		

Performance Task and Rubric Template

Candidate

Grade:

Topic:

Concept:

Essential Question:

Performance Task:

Rubric:

Grading Scale: Proficient =	Emerging =	Satisfactory =	Needs Work =
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Overall Score:

Category	Needs Work =1 pt.	Emerging = 2 pts.	Satisfactory =3 pts.	Proficient = 4 pts.
Understanding of Content				
Mechanics				

Use Lower and Higher Level Verbs When Writing Objectives

"The students will be able to..." (SWBAT)

Lower Level:

Knowledge: recall, identify, label, list, define

<u>Comprehension</u>: describe, retell, explain in own words, translate, expand

<u>Higher Level</u>:

<u>Application</u>: apply, illustrate, interview, use, diagram, show

<u>Analysis</u>: compare, conclude, examine

<u>Synthesis</u>: create, predict, solve, invent, design, compose, blend, produce

Evaluation: judge, rank, debate, editorialize, criticize, recommend