

## **Week 4: Systems Thinking and Complexity in Development**

Assignment Options:

### **Option 1: Systems Diagram**

Create a systems diagram illustrating the interconnectedness of factors contributing to a selected development challenge, explaining how systems thinking helps identify leverage points.

### **Option 2: Systems Analysis Report**

Analyze a complex development issue using systems thinking principles, identifying feedback loops and proposing interventions for systemic change.

## **Instructions**

In Week 4, we explored systems thinking and its application in development. This assignment offers you two distinctive options to showcase your grasp of systems thinking principles and their relevance in addressing complex development challenges.

### **Option 1: Systems Diagram**

Imagine you're faced with a complex development challenge (*e.g improving access to clean water in a rural community*). Your task is to create a systems diagram that visually maps out the intricate web of factors contributing to this challenge.

**Step 1: Select a Development Challenge:** Choose a real or hypothetical development challenge that interests you. It could relate to healthcare, education, agriculture, or any other aspect of development.

**Step 2: Visualize the Interconnectedness:** Use a digital tool of your choice to create a visual representation (a diagram) that illustrates how various elements—social, economic,

environmental, and cultural—are interconnected within this challenge. Show how changes in one element can affect others.

**Highlight Leverage Points:** Explain, within your diagram or through accompanying text, how systems thinking helps identify leverage points—those critical junctures where targeted interventions can lead to significant positive changes.

### Option 2: Systems Analysis Report

Imagine you've been tasked with analyzing a complex development issue and proposing systemic interventions. Your goal is to write a systems analysis report that dissects the challenge, identifies feedback loops, and suggests interventions for systemic change.

**Step 1: Select a Complex Development Issue:** Choose a development issue that intrigues you. It could relate to urbanization, poverty, gender equality, or any other complex societal problem.

**Step 2: Analyze Feedback Loops:** Using systems thinking principles, analyze the issue to identify feedback loops—cycles of cause and effect that perpetuate the challenge. Explain how these feedback loops contribute to the persistence of the problem.

**Step 3: Propose Systemic Interventions:** Based on your analysis, propose interventions that target specific points within the system to disrupt feedback loops and create positive change. Describe how these interventions could lead to systemic improvements.

Both options require you to apply systems thinking to real-world or hypothetical development challenges. Choose the one that aligns with your interests and strengths.

### Submission

Submit your assignment, whether it's a systems diagram or a systems analysis report, through the designated platform by the specified deadline. Ensure your submission is easily accessible and viewable.

This assignment isn't just about creating visuals or reports; it's an opportunity to deepen your understanding of systems thinking and its potential to drive meaningful change in the realm of development (See Rubrics below for assessment criteria).

Should you have any questions or need clarification, feel free to contact your instructor via email.

Get ready to embrace the complexities of development and explore how systems thinking can lead to transformative solutions!

Criteria	Excellent (3 pts)	Good (2 pts)	Fair (1 pt)	Needs Improvement (0.5 pt)	Poor (0 pts)
<b>Option 1: Systems Diagram</b>					
1. Clarity and Organization	<p>Exceptionally clear, well-organized diagram with logical flow.</p> <p>Components and relationships are labeled and easy to follow.</p> <p>Aesthetically pleasing.</p>	<p>Clear and well-organized diagram with good flow. Components and relationships are mostly labeled and easily understood.&lt;br&gt;Visually appealing.</p>	<p>Diagram is somewhat clear and organized but may have minor flow issues.</p> <p>Labels and relationships are present but could be clearer.</p> <p>Generally visually appealing.</p>	<p>Diagram lacks clarity and organization, making it somewhat challenging to follow.</p> <p>Labels and relationships are unclear or missing.</p> <p>Needs improvement in visual appeal.</p>	<p>Diagram is confusing, disorganized, or chaotic.</p> <p>Components and relationships are unclear or absent.</p> <p>Detracts from visual appeal.</p>

2. Connections and Interconnectedness	Demonstrates intricate connections between elements within the development challenge.	Effectively shows relationships between elements with clear visual cues.	Shows some relationships between elements but may lack clarity in visual representation.	Relationships are unclear or missing in some parts of the diagram, affecting overall understanding.	-Diagram does not effectively illustrate connections between elements.
	Relationships between elements are clearly illustrated with supporting explanations.	Relationships are well-explained, enhancing understanding.	Explanations provide some insight into interconnectedness.	Explanations lack clarity in explaining interconnectedness.	Interconnectedness is entirely absent.
	Outstanding representation of interconnectedness.	Strong representation of interconnectedness.	Adequate representation of interconnectedness.	Limited representation of interconnectedness.	Fails to convey any representation of interconnectedness.
3. Leverage Points Explanation	Exceptionally clear and comprehensive explanation of how systems thinking identifies leverage points.	Clear and detailed explanation of leverage points within the system.	Somewhat clear explanation of leverage points but may lack specificity in connecting them to the diagram.	Explanation of leverage points lacks clarity or specificity.	No or inadequate explanation of leverage points.
	Provides specific examples within the diagram and supporting text.	Connects leverage points to specific elements in the diagram.	Provides general insights into leveraging systemic change.	May not effectively connect leverage points to the diagram.	Fails to connect leverage points to the diagram.
	Exceptional insight into	Demonstrates a strong understanding of leveraging		Limited insights into leveraging systemic change.	Does not demonstrate an understanding of leveraging systemic change.

	leveraging systemic change.	systemic change.			
4. Originality and Creativity	<p>Exceptionally original and creative approach to the assignment.</p> <p>Demonstrates innovative thinking and creative design choices.</p> <p>Highly engaging and original.</p>	<p>Demonstrates originality and creative elements in the approach to the assignment.</p> <p>Creative design choices enhance the assignment.</p> <p>Engaging and original.</p>	<p>Somewhat original with limited creative aspects in the approach.</p> <p>Design choices are somewhat creative.</p> <p>Acceptable level of engagement and originality.</p>	<p>Lacks originality and creativity in the approach.</p> <p>Design choices may be unoriginal.</p> <p>Limited engagement and originality.</p>	<p>Completely unoriginal and devoid of creativity in the approach.</p> <p>Design choices are uninspired.</p> <p>Fails to engage or demonstrate any originality.</p>
5. Visual Appeal (for Option 1)	<p>Exceptionally visually appealing with effective use of visuals, colors, and design elements.</p> <p>Visually captivating and enhances the content.</p> <p>Outstanding visual appeal.</p>	<p>Visually appealing with good use of visuals, colors, and design elements. Enhances the content visually.</p> <p>Strong visual appeal.</p>	<p>Visually presented but may have limited impact due to issues with visuals, colors, or design.</p> <p>Adequate visual appeal.</p>	<p>Not well-incorporated visuals, lacks impact on visual appeal</p>	<p>Detracts from visual appeal.</p>

## Option 2: Systems Analysis Report

1. Analysis of Feedback Loops	<p>Exceptionally thorough analysis of feedback loops within the development issue.</p> <p>Provides clear, concise descriptions of feedback loops, including identification of reinforcing and balancing loops.</p> <p>Exceptional insights into the role of feedback loops in the issue.</p>	<p>Comprehensive analysis of feedback loops, with clear descriptions and identification of reinforcing and balancing loops.</p> <p>Strong insights into the role of feedback loops in the issue.</p>	<p>-Analysis of feedback loops is present but may lack depth in descriptions or clarity in identifying reinforcing and balancing loops.</p> <p>Provides some insights into the role of feedback loops.</p>	<p>Analysis of feedback loops lacks depth, clarity, or completeness.</p> <p>May not clearly identify reinforcing and balancing loops.</p> <p>Provides limited insights into the role of feedback loops.</p>	<p>No or inadequate analysis of feedback loops.</p> <p>Fails to identify reinforcing and balancing loops.</p> <p>Does not demonstrate an understanding of the role of feedback loops.</p>
2. Proposed Systemic Interventions	<p>Innovative, well-justified interventions proposed with clear connections to feedback loops and the systemic issue.</p> <p>Offers detailed plans for intervention implementation</p>	<p>Effective interventions proposed with clear connections to feedback loops and the systemic issue.</p> <p>Provides plans for intervention implementation</p>	<p>Interventions are proposed but may lack depth, specificity, or clarity in connecting to feedback loops.</p> <p>Offers some plans for intervention implementation</p>	<p>Proposed interventions lack depth, specificity, or clear connections to feedback loops and the systemic issue.</p> <p>May not provide plans for intervention implementation</p>	<p>No or inadequate proposed interventions.</p> <p>Fails to connect interventions to feedback loops or the systemic issue.</p> <p>Does not demonstrate an understanding</p>

	Exceptional understanding of systemic interventions.	Strong understanding of systemic interventions.	Adequate understanding of systemic interventions.	Limited understanding of systemic interventions.	of systemic interventions.
3. Writing Quality and Clarity	<p>- Exceptional writing quality with clear, concise explanations and coherent structure.</p> <p>Exemplary use of terminology and language.</p> <p>Writing greatly enhances understanding.</p>	<p>Good writing quality with mostly clear explanations and logical structure.</p> <p>Effective use of terminology and language.</p> <p>Writing enhances understanding.</p>	<p>Writing quality is acceptable but may lack clarity, coherence, or precision at times.</p> <p>Uses terminology and language effectively, with some lapses.</p>	<p>Writing quality hinders understanding due to issues of clarity, coherence, or precision.</p> <p>Inconsistent use of terminology and language.</p>	<p>Poor writing quality that is unintelligible, incoherent, or lacking clarity throughout.</p> <p>Significant issues with terminology and language use.</p>
4. Originality and Creativity	<p>Exceptionally original and creative approach to the assignment.</p> <p>Demonstrates innovative thinking and creative design choices.</p> <p>Highly engaging and original.</p>	<p>Demonstrates originality and creative elements in the approach to the assignment.</p> <p>Creative design choices enhance the assignment.</p> <p>Engaging and original.</p>	<p>Somewhat original with limited creative aspects in the approach.</p> <p>Design choices are somewhat creative.</p> <p>Acceptable level of engagement and originality.</p>	<p>Lacks originality and creativity in the approach.</p> <p>Design choices may be unoriginal.</p> <p>Limited engagement and originality.</p>	<p>Completely unoriginal and devoid of creativity in the approach.</p> <p>Design choices are uninspired.</p> <p>Fails to engage or demonstrate any originality.</p>

5. Relevance	Expertly demonstrates the intersection of systems thinking with the selected development challenge.	Effectively demonstrates the intersection of systems thinking and the challenge	Somewhat demonstrates the intersection.	Limited demonstration of the intersection.	Does not effectively demonstrate the intersection.
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**Total Points: 15**