

**LMU** LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

**SINUS in Bavaria**

Christoph Hammer  
Didaktik der Mathematik

## SINUS in Bavaria

- Three steps
- Proceeding
- Feedback
- Coordination
- Problems
  
- Two examples

9. Juni 2009

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## Three steps



- SINUS** ■ Modules
- Cooperation
- Coordination
- Networking
  
- SINUS-Transfer** ■ School groups (2 - 4)
- SINUS Bayern** ■ Coaching by coordinators
- Responsibility

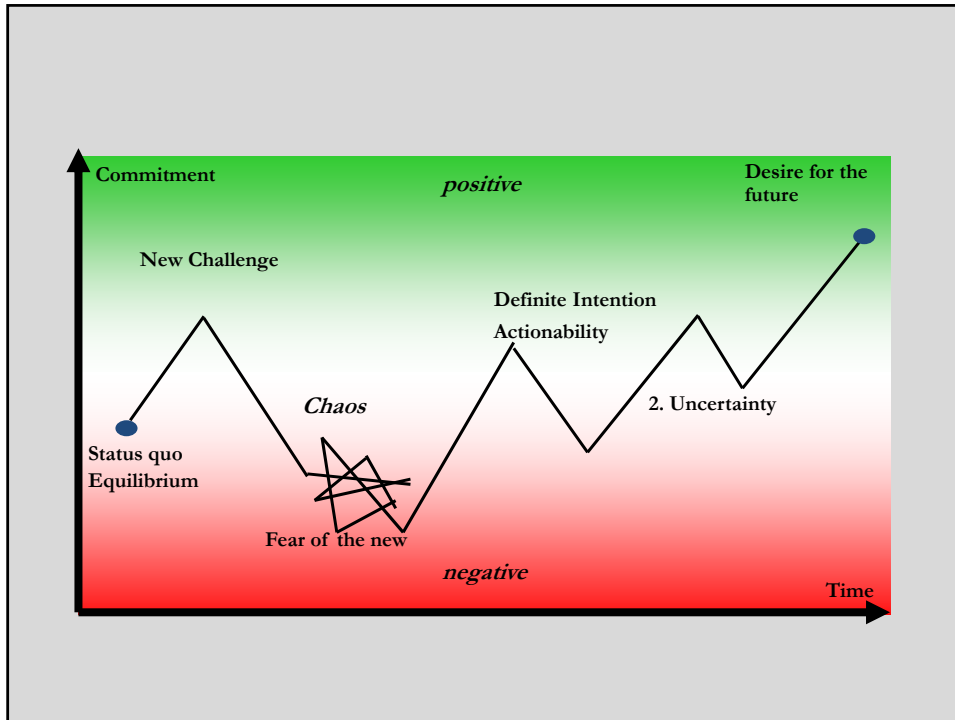
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<h2>Proceeding</h2>			
<p><i>4 meetings (afternoon)/ year</i></p> <p><i>Whole-day- conference</i></p> <p>9. Juni 2009</p>	<ul style="list-style-type: none"> <li>■ Input (examples of good practise)</li> <li>■ Cooperation in school-spanning teams</li> <li>■ Definit plans of lessons following soon</li> <li>■ Report, reflection, discussion</li> </ul>		
	<ul style="list-style-type: none"> <li>■ Self-organized workshops</li> <li>■ Talks from well-known lecturers</li> </ul>		

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<h2>Feedback</h2>			
	<ul style="list-style-type: none"> <li>■ Evaluation (IPN)</li> <li>■ Voting by feet (voluntariness)</li> <li>■ Teacher´s declarations</li> </ul>		

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<h2>Coordination</h2>			
<p><b>Coordinators</b></p> <p><b>„Landes- koordinator“</b></p> <p>9. Juni 2009</p>	<ul style="list-style-type: none"> <li>■ Reduction of teaching load (4 lessons)</li> <li>■ Responsibility</li> <li>■ Documentation</li> <li>■ Funds management</li> <li>■ Advanced training of the coordinators</li> <li>■ Overall organisation</li> <li>■ Further development</li> <li>■ Public relations (printed publications; webpage: <a href="http://www.sinus-bayern.de">www.sinus-bayern.de</a>)</li> </ul>		

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<h2>Problems</h2>			
<p><b>Participants</b></p> <p><b>Change processes</b></p> <p><b>Challenge</b></p> <p>9. Juni 2009</p>	<ul style="list-style-type: none"> <li>■ Workload</li> <li>■ Setback</li> <li>■ Motivational encouragement</li> </ul>		




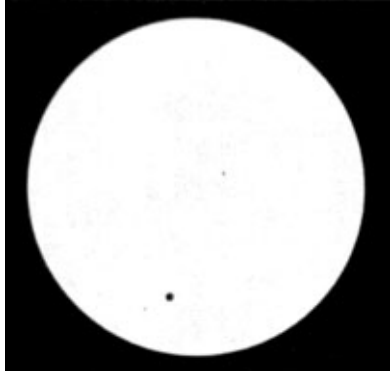
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<h2>Examples</h2>			
<p><i>A really good question means ...</i></p>	<ul style="list-style-type: none"> <li>■ Lead in to the topic</li> <li>■ Core of the matter</li> <li>■ Starting point</li> </ul>		
<p><i>Example for a „good“ question</i></p>	<ul style="list-style-type: none"> <li>■ <u>Does a heavier skier have an advantage in a downhill race?</u></li> </ul>		
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*You see the moon and the sun  
(the dark spot is the shadow of Venus)*

## Light and Shadow

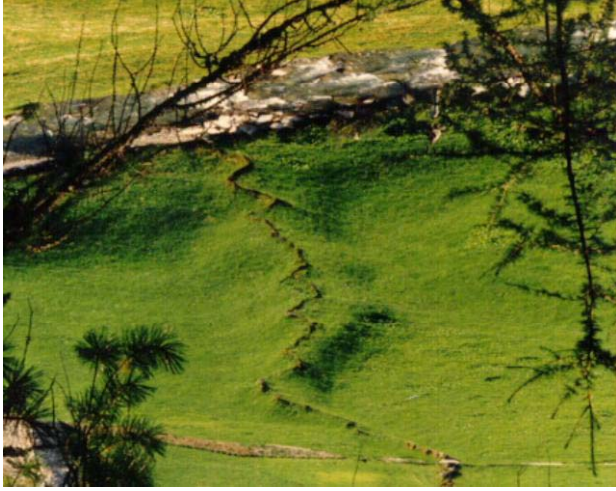






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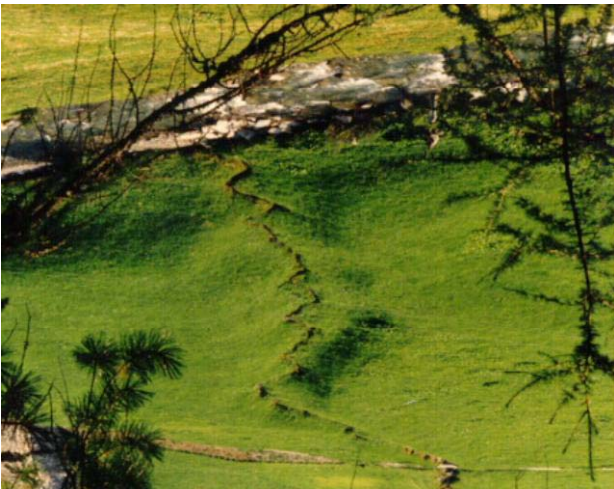
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*What do you see?*



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<p data-bbox="336 577 443 607"><i>And now?</i></p>  <p data-bbox="341 965 435 987">9. Juni 2009</p>			

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<p data-bbox="336 1514 469 1570"><i>What do you see?</i></p>  <p data-bbox="341 1895 435 1917">9. Juni 2009</p>			

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<h2>Thank you very much!</h2>			
<ul style="list-style-type: none"><li>■ <a href="mailto:hammer@math.lmu.de">hammer@math.lmu.de</a></li><li>■ <a href="http://www.mathematik.uni-muenchen.de/~didaktik">www.mathematik.uni-muenchen.de/~didaktik</a></li><li>■ <a href="http://www.sinus-bayern.de">www.sinus-bayern.de</a></li></ul>			
<p>9. Juni 2009</p>			