

Workshop 1B Classroom discussions on sustainability issues



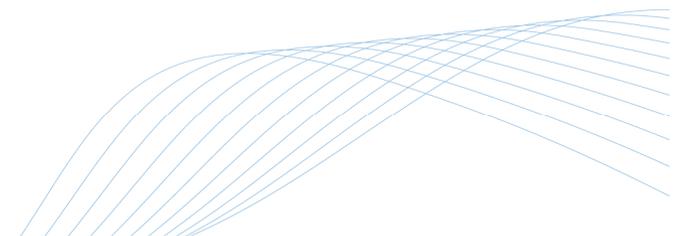
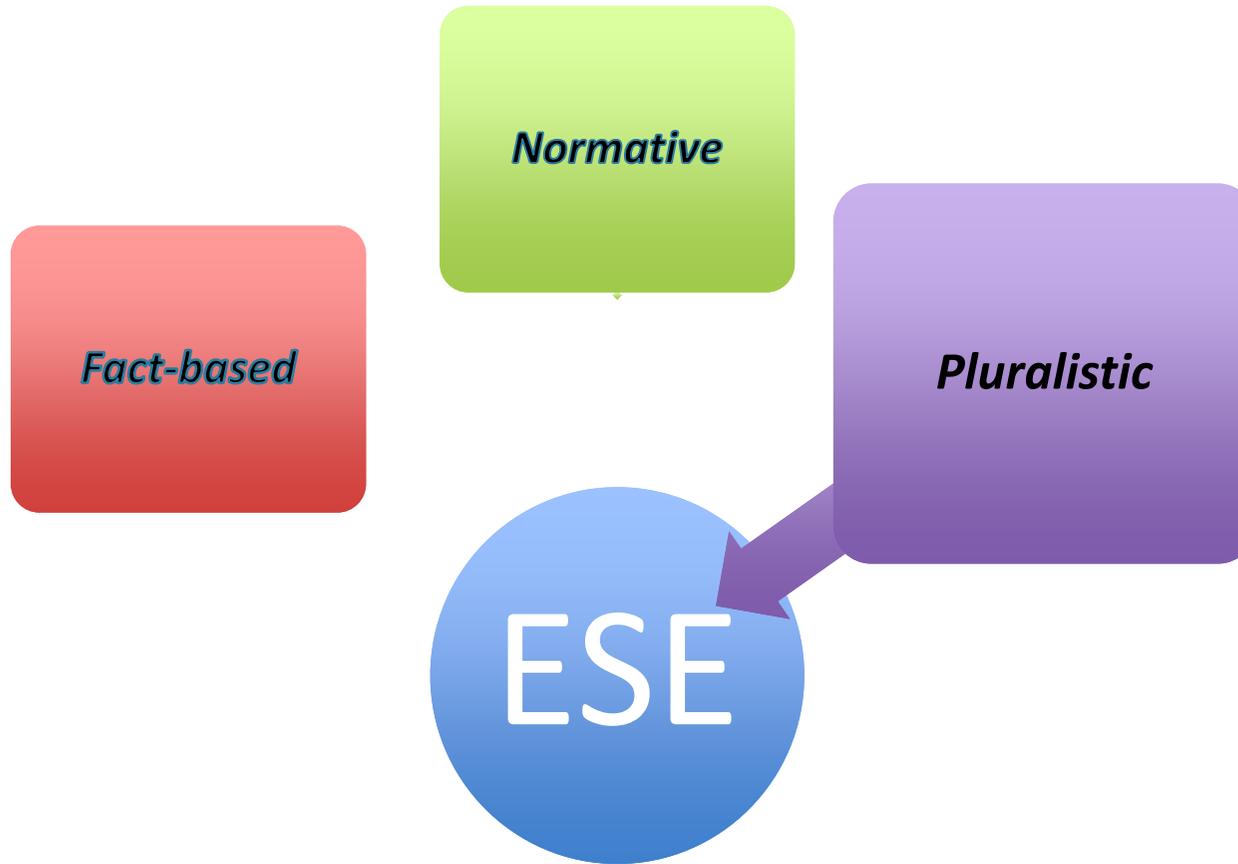
Johan Öhman
Örebro University
Sweden

Studies of Meaning-making in
Educational Discourses

Agenda

- Group discussions about two classroom-transcripts
- Some research findings relating to chapter 14:
Classroom discussions: Students' learning in argumentation about ethical and political aspects of sustainability issues (KARIN RUDSBERG AND JOHAN ÖHMAN)

If democracy is a prioritised value...



ESE-tradition	Fact-Value relation	Democratic process
Fact-based	Facts	After
Normative	Fact → Values	Before
Pluralistic	↕ Facts ↔ Values ↕	In

(Öhman, 2008)

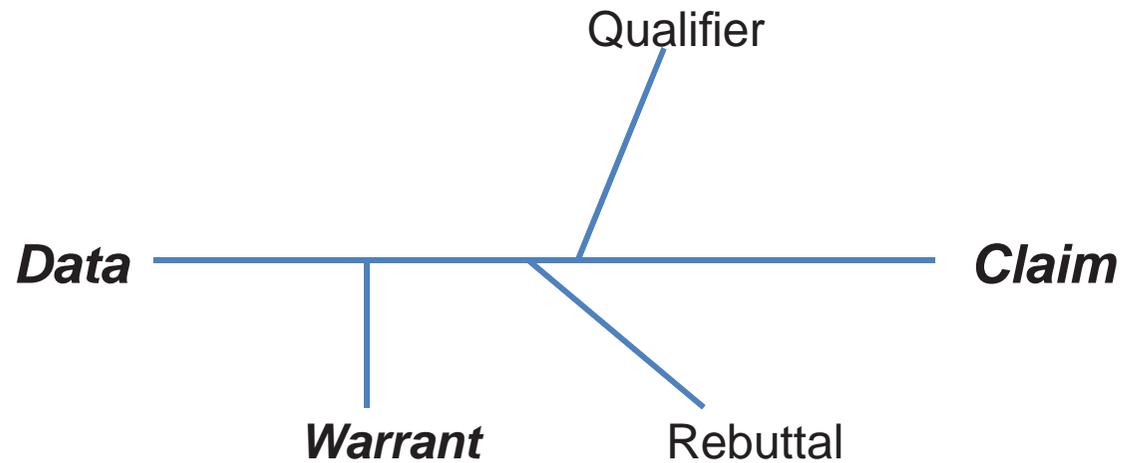


Figure 14.1 Toulmin's argument pattern

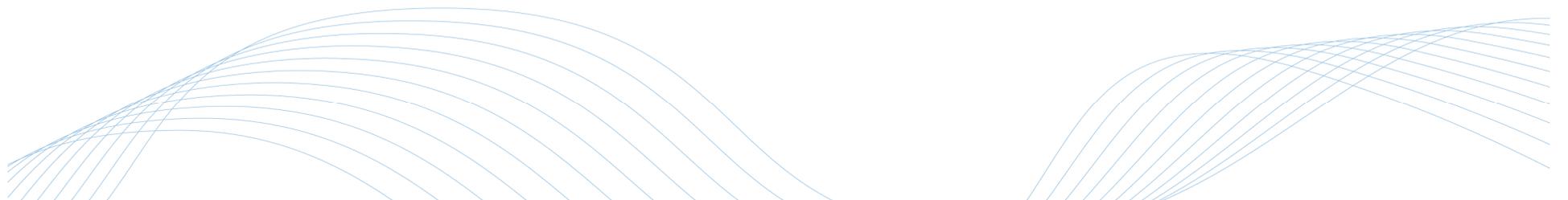
Source: (Toulmin 1958/2003)

<https://www.youtube.com/watch?v=D-YPPQztuOY>

Questions

- ***What are students learning when participating in discussions?***
- ***What is the role of knowledge?***
- ***How do students influence each other during discussions?***
- ***What is the role of the teacher in discussion?***

Studies of student discussions



How are teachers acting during student discussions?

Rudsberg, Karin & Öhman, Johan (2010). Pluralism in practice – experiences from Swedish evaluation, school development and research. *Environmental Education Research*, 16(1), 115–131.

What are students learning when participating in discussions?

Rudsberg, Karin; Öhman, Johan & Östman, Leif (2013). Analysing students' learning in classroom discussions about socio-scientific issues. *Science Education*, 97(4), 594–620.

How are students influencing each other during discussions?

Öhman, Johan & Öhman, Marie (2013). Participatory approach in practice: an analysis of student discussions about climate change. *Environmental Education Research*, 19(3), 324–341.

What is the role of knowledge during discussion?

Rudsberg, Karin & Öhman, Johan (2015). The role of knowledge in participatory and pluralistic approaches to ESE. *Environmental Education Research*, 21(7), 955–974.

How are young people discussing sustainability issues in social media?

Andersson, Erik & Öhman, Johan (2017). Young people's conversations about environmental and sustainability issues in social media. *Environmental Education Research*, 23(3-4), 467–487.

How are students influencing each other during discussions?

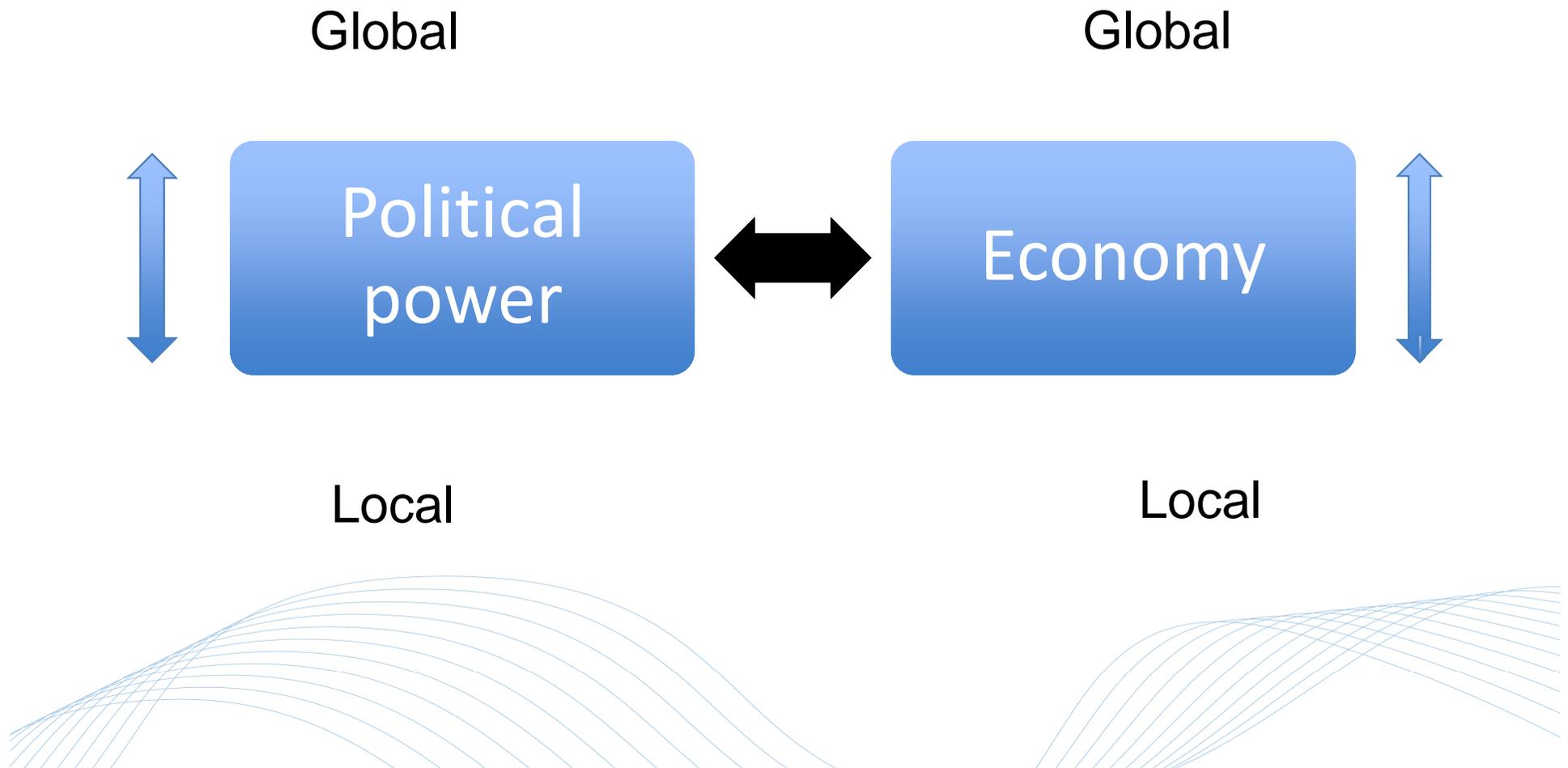
Öhman, Johan & Öhman, Marie (2013). Participatory approach in practice: an analysis of student discussions about climate change. *Environmental Education Research*, 19(3), 324–341.



- *Background:* The shift from teacher lead to student centred approaches
- *Purpose:* **To investigate and clarify the constitution of knowledge in student discussions (process and content)**
- *Empirical material:* Ten week thematic project on climate change in Swedish upper secondary school with a pronounced sustainability approach. Video-recorded student discussions in examining group seminars (2 x 90 min) (Transcript 1)
- *Methods:* Epistemological Moves Analysis (EMA) and pragmatic discourse analysis



Understanding the difficulties of international climate change agreements



Epistemological move	Function	Example	Frequency
<i>Confirming move</i>	A direct confirmation of somebody's statement	<p>"Yes, exactly as you say, you don't want to loose your power";</p> <p>"I think it is very interesting what you say..."</p>	18
<i>Mutual agreement move</i>	A statement is developed by a second person and the first person confirms that this development is in line with his or her view	<p>"Yes, exactly..."</p> <p>"Absolutely..."</p>	23
<i>Fulfilling move</i>	A statement that brings another person's unfinished statement to completion	<p>"... one-way trade between west and... north and south";</p> <p>"... have to listen to that country</p>	20
<i>Clarifying move</i>	A question that clarifies a certain description and makes it more precise	"You mean that all countries would be self-supporting?"	4
<i>Critical generative move</i>	A question that makes the participants reconsider and deepens the discussion	"But, is there really a sustainable way of development if we have the current economical system?"	17
<i>Counter-argument move</i>	A statement that questions another persons statement	"I question some parts of this, because I think that..."	1

Conclusions

- Students establish complex and insightful knowledge: participatory approaches can ***facilitate advanced learning processes*** and discussions are an important part of those processes
- There is the risk that governing processes within peer discussions make the discussions very ***consensus oriented***. Ideological conflicts between students are hidden. Thus, knowledge does not necessarily become more diverse



How are teachers acting during student discussions?

Rudsberg, Karin & Öhman, Johan (2010). Pluralism in practice – experiences from Swedish evaluation, school development and research. *Environmental Education Research*, 16(1), 115–131

- **Purpose: To analyse the functions of teachers' actions in relation to students' meaning-making**
- *Empirical material:* Video-recorded of an environmental ethical exercise discussions in (90 min) in a Swedish upper secondary school (Transcript 2)
- *Method:* Epistemological Moves Analysis (EMA)



Identified teacher moves



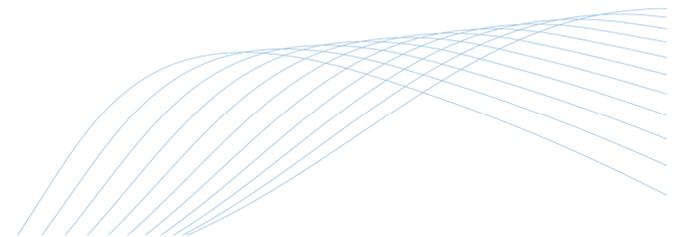
<i>Move</i>	<i>Function</i>
Generalising move	<i>Generative function:</i> The teacher reformulates, introducing general concepts →Students create generalisations
Specifying move	The teacher points to what the student ought to focus →Student specify his/her statement
Comparative move	<i>Evaluative function:</i> The teacher adds new positions and/or perspectives →Students compare and evaluate different alternatives
Testing move	The teacher asks for the validity in different circumstances →Student test the prerequisites of statement

Conclusions

Teachers' active participation in students' discussions of sustainability may be important for two reasons:

Quality – to deepen and nuance the students' standpoints

Diversity – to challenge the common view and allow for alternative possibilities and views



Our studies have shown :



- that students can learn to **formulate an argument** and gradually make it *clearer, deeper and more complex* by participating in discussions
- that **knowledge plays a crucial role** in these discussions and that students can learn how to *use their knowledge in social practice*, connect their knowledge to *value judgements* in an argument and *contextualise* their knowledge relation to an important question
- that students' **learning progress** is strongly connected to the *interaction with peers* when they respond to, develop and criticise other students' arguments in their own argumentation

Didactic challenges:

- Sustainable development tends to become a *harmony* concept rather than a *conflict* concept
- Discussions tends to be very consensus-oriented
- Difficult to stage “real” discussion
- Forcing students to take sides
- How to respond to “alternative facts”?
- Are all opinions acceptable?
- Reproduce prevailing power relations

(see Öhman & Öhman 2013)