



How to start with IBSE?

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A decorative graphic is positioned at the bottom left of the slide. It features a yellow and black striped bee flying towards a stylized sunflower with orange and yellow petals. A thin, black, swirling line starts from the left side of the slide, loops around the bee and flower, and extends towards the right.

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Focus on teachers:

- **Teachers need preparation for new ways and/or content of teaching (USA)**
- **Good teachers are good learners**

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Focus on:



- **Materials** (13 topics)
- (Adequate) classroom **equipment**
- **Seminars** for teachers



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Materials



- Content matches “problematic” parts of curricula
- Teachers actively involved
- Constructivist approach

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Materials (11 topics):

- Classifying and Ordering
- Separating Mixtures
- Inflow, Outflow and Pouring of Liquids
- Electricity and Magnetism
- Temperature and Heat
- Measuring
- Balancing and Weighting
- Light and Colors
- Weather
- (Toys in) Motion
- Science Outdoors



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Materials (1 1+2 topics):



- for **kindergartens**:
- From counting to measurement
- Electricity and magnetism for kindergartens

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Lessons planning:

- Goals and objectives clearly stated (curricula)
- Active learning
- Guided inquiry (fair test, control of variables)
- Documenting, recording, discussing, communicating
- Reflection
- Suggestions for
 - assessment and
 - possible further inquiriesadded.



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Equipment



- “boxes” available for rent (Swedish model):
 - 15 sets of equipment:
 - 14 pairs of pupils+ teacher
 - content matches didactic materials
 - *all inclusive*
 - Project (local authorities) responsible for refurbishing

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Follow up

- Classroom visits
- Teachers' reports (documented)
- Evaluation meetings

- External evaluation



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Thank you!

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