Ett årtionde av FN-dekaden för lärande om hållbar utveckling

- vilka blev effekterna på svensk skola?

Niklas Gericke & Daniel Olsson
Investigating effects and possible success factors of ESD implementation in the Swedish school system

Daniel Olsson, teacher
Karlstad municipality,
PhD-student Karlstad University

Teresa Berglund, teacher
Karlstad municipality,
PhD-student Karlstad University

Shu-Nu Chang-Rundgren, Prof.
Karlstad University

P.I. Niklas Gericke, Assoc.
Prof. Karlstad University

Hans-Åke Scherp, Assoc. Prof.
Karlstad University

Jelle Boeve-de Pauw, post-doc, Antwerp University; Belgium

Anna Mogren
The Global School, Karlstad University
DESD

• Is manifested in the steering documents of the compulsory school, upper secondary school and higher education, as well as a content (SD) as an approach (ESD).

• The decade is coming to an end, so which effects has the implementation had?
Overall Aim

Investigating effects and possible success factors of ESD implementation in the Swedish school system
Overall Aim

To investigate: 1) the effects of the ESD implementation 2) and in what ways has it been implemented; in Swedish schools at:

- School leadership level
- Teacher level
- Student level

- Compare the results with the implementation in Taiwan (another cultural context)
Teacher perspective

Project with Carola Borg


Overall Aim

To investigate: 1) the effects of the ESD implementation 2) and in what ways has it been implemented; in Swedish schools at:

- School leadership level
- (Teacher level)
- Student level
- Compare the results with the implementation in Taiwan (another cultural context)
Context of the study

ESD - schools ↔ REF. - schools
Institutions working with ESD-implementation

Skolverket

Grön Flagg

Den Globala Skolan
Overall Aim

To investigate: 1) the effects of the ESD implementation 2) and in what ways has it been implemented; in Swedish schools at:
- School leadership level
- Teacher level
- Student level
- Compare the results with the implementation in Taiwan (another cultural context)
Context of the study

ESD-group of students
Grade 6, 9 and 12

REF-group of students
Grade 6, 9 and 12
Sample of schools

Eco-Schools

School of sustainable development

WWF model schools

The Global School (DGS)

Ranking of schools

ESD-group
26 schools
N=1312

SALSA database

School leaders and local authorities

REF-group
25 schools
N=1101
Sample of schools

- Eco-Schools
- School of sustainable development
- WWF model schools
- The Global School (DGS)

Ranks of schools:

- ESD-group 26 schools N=1312

SALSA database:

- School leaders and local authorities

REF-group 25 schools N=1101
Sample of schools

Eco-Schools

School of sustainable development

WWF model schools

The Global School (DGS)

Ranking of schools

ESD-group
26 schools
N=1312

SALSA database

School leaders and local authorities

REF-group
25 schools
N=1101
# Participants

<table>
<thead>
<tr>
<th></th>
<th>Grade 6</th>
<th>Grade 9</th>
<th>Grade 12</th>
<th>Response rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESD</td>
<td>505</td>
<td>407</td>
<td>400</td>
<td>79.2%</td>
</tr>
<tr>
<td>REF</td>
<td>429</td>
<td>434</td>
<td>238</td>
<td>84.4%</td>
</tr>
<tr>
<td>Total</td>
<td>934</td>
<td>841</td>
<td>638</td>
<td>80.7%</td>
</tr>
</tbody>
</table>

N = 2413
Content and competences

SD as a content
- Environment
- Economy
- Society

ESD as an approach
- Action competence
- Pluralism
- Transformative learning

Sustainability Consciousness
Sub-themes of SD

- **Environmental:** natural resources, climate change, rural development, sustainable urbanization, disaster prevention and mitigation

- **Economic:** poverty reduction, corporate responsibility and accountability, and re-orienting market economy

- **Social:** human rights, peace and human security, gender equality, cultural diversity and intercultural understanding, health, HIV & AIDS and new forms of governance.

(UNESCO, 2006)
Sustainability consciousness (SC)

- Knowingness (K)
- Attitudes (A)
- Behavior (B)

(Michalos et al. 2011, 2012)
Survey instrument

<table>
<thead>
<tr>
<th></th>
<th>K</th>
<th>A</th>
<th>B</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Env</td>
<td>6</td>
<td>4</td>
<td>7</td>
<td>17</td>
</tr>
<tr>
<td>Eco</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Soc</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>EnvEcoSoc</td>
<td>19</td>
<td>14</td>
<td>17</td>
<td>50</td>
</tr>
</tbody>
</table>

Sustainability consciousness

Example items:

- Sustainable development demands that we humans reduce all sorts of waste (ENV K)
- I think that companies in rich countries should give employees in poor nations the same conditions as in rich countries (ECO A)
- I treat everyone with the same respect, even if they have another cultural background than mine (SOC B)
Results, sustainability consciousness

Grade 6

Grade 9

Grade 12
Overall Aim

To investigate: 1) the effects of the ESD implementation 2) and in what ways has it been implemented; in Swedish schools at:

- School leadership level
- Teacher level
- Student level
- Compare the results with the implementation in Taiwan (another cultural context)
School organisation-framework a holistic idea

(Scherp, H-Å, 2013)
Method school organisation study

• Sampling strategi: 10 Swedish upper secondary schools with an explicit ESD-profile were selected.

• Semi structured interview with principals.
  – survey data about teaching and learning situation was also collected from teachers

• Concept maps on principal understanding of high quality in education were created.

• Translating qualitative data to quantitive by assessing Cmaps statements.
Quality criteria used by schools when implementing ESD

- Context and control bound implementation strategies of ESD
- External living holistic ideas and Continuous towards consensus based proactive leadership
- Interaction of holistic idea and school development and Internal living holistic idea
- Enhancement implementation strategies of ESD. Strong focus in internal and external holistic idea.
Quality criteria used by schools when implementing ESD

- Context and control bound implementation strategies of ESD
- External living holistic ideas and continuous towards consensus based proactive leadership
- Interaction of holistic idea and school development and internal living holistic idea
- Enhancement implementation strategies of ESD. Strong focus in internal and external holistic idea.
Publications


