The Role of Multilingualism in Education for Sustainable Development:

Global Challenges – Local Responses

Empirical Data, Teaching Practice and Future Research Needs

UNESCO Global Expert Meeting: “Multilingualism in Cyberspace for Inclusive Sustainable Development”

Khanty-Mansiysk, Russian Federation, June 4th – 9th

Dr. Tobias Schroedler
Contents

- Local Responses to Global Challenges
  - [Preamble: Multilingualism as a result of mass migration]
  - Empirical Research on Multilingualism as a Resource
  - Training Teachers in Preparation for Multilingual Classroom Realities
  - Future Research Needs
Global Challenges: Migration and Multilingualism

63.91 million persons of concern globally - end of 2015

Legend

Filter by population type

Refugees 16,121,427
Asylum-seekers 3,219,941
IDPs 37,494,172
Returnees 2,510,729
Stateless persons 3,687,729
Others 870,740

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Global Challenges: Migration and Multilingualism
Global Challenges: Migration and Multilingualism

Net Migration
Germany
1991-2015
Global Challenges: Migration and Multilingualism
Local Responses

Migration and Multilingualism in Hamburg:

• Metropolitan areas of Germany: more *diverse* than ever

• Migrants from nearly all recognised countries: 190

• Approximately every second child is born into a ‘migrant’ family

• 30% of Greater Hamburg’s population has a ‘migrant background’ (50% of the population under 18)

We know that migrants from all over the world are represented (in large numbers in the population – we do not know how many languages are spoken)
Global Challenges: Migration and Multilingualism
Local Responses

- Numerous traditional nation states have come to the realization that multilingualism has become societal normality
- In our work in the DivER research institute, we continually try to identify the best possible solutions to cater for multilingualism in education
- For an overview, 3 exemplifying projects will be presented in the following:
  - Empirical Research on Multilingualism as a Resource (KNUM Project)
  - Training Teachers in Preparation for Multilingual Classroom Realities (ProfaLe Project)
  - Future Research Needs (MeMe Project)
1. Multilingualism for Quality Education: Research
Multilingualism as a sustainable Resource in University Governance
(The KNUM Project)

Research Questions:
1. Is the multilingual reality of our present-day society reflected in the
   administrative functioning of one of Germany’s largest education
   institutions?
2. Are language skills (multilingual repertoires) needed, used and valued?
   (Are there resources that should be catered for more sustainably)
3. Are language practices within the institutional governance fair and
   efficient?
Multilingualism as a sustainable Resource in University Governance (The KNUM Project)

The Project:

• In a large survey, data on the multilingual repertoires and on the usage of LOTG was collected
• Participants were all members of staff (N=2243) in technical and administrative roles
• A ‘representative’ response rate of ~30% (n=661)
Multilingualism as a sustainable Resource in University Governance (The KNUM Project)

Research Question 1 (Multilingual Reality):
• Over 30 different L1s were identified; over 60 different Ls altogether
• 15% of the respondents speak a LOTG as a first language
• 510 (out of 661) speak 3 or more languages
• Order of LOTG skills: English, French, Spanish, Italian, Russian, Swedish

Result:
• The multilingual reality is to some extent represented, BUT most named language skills from typical MFLE (out of a total of 1712 entries, 1385 are typical MFLs)
• migrant population of approximately 30% (190 different countries), our results (most likely do not represent the degree of multilingualism in Hamburg’s population
Multilingualism as a sustainable Resource in University Governance (The KNUM Project)

Research Question 2 (Language skills needed, used and valued):

• 72% use LOTG regularly in work (English (450), French (34), Spanish (27), Russian (12), Italian (10)
• 81% consider their multilingual repertoire useful
• 75% would like to use LOTG more often

Result:
• Needed and used: yes!...
• BUT English is by far the most dominant
• Value of other languages...?
Multilingualism as a sustainable Resource in University Governance (The KNUM Project)

Research Question 3 (Language Practices fair and efficient)

<table>
<thead>
<tr>
<th>What languages have you used?</th>
<th>What languages would you like to use?</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 450</td>
<td>English 340</td>
</tr>
<tr>
<td>French 34</td>
<td>French 89</td>
</tr>
<tr>
<td>Spanish 27</td>
<td>Spanish 81</td>
</tr>
<tr>
<td>Russian 12</td>
<td>Italian 23</td>
</tr>
<tr>
<td>Italian 10</td>
<td>Russian 19</td>
</tr>
<tr>
<td>Chinese 4</td>
<td>Chinese 12</td>
</tr>
</tbody>
</table>

450:87 340:324
2. Multilingualism for Quality Education: Teaching Enabling Future Teachers to cater for multilingualism in the classroom (ProfaLe Project)

Background:

• Quality Education means that all children have access to education and have equal opportunities for educational achievement
• 50% of Hamburg’s population under 18 has a migrant background
• Teachers will be facing challenges posed by multilingualism in all subject teaching

Intervention (pilot phase)

• In compulsory seminars, teachers of all science and mathematics subjects are prepared to deal with challenges posed by linguistic and cultural diversity
• Teaching follows four steps: Necessity Awareness, (Meta-)Knowledge on GFL, Practical/Applicable Knowledge; Reflection and Implementation
2. Multilingualism for Quality Education: Teaching
Enabling Future Teachers to cater for multilingualism in the
classroom (ProfaLe Project)

Step 1 (Necessity Awareness)

• Sociological and statistical knowledge on migration and multilingualism
• Raising awareness for continuous language-sensitive subject teaching

Step 2: (Meta Knowledge)

• How does German (the German language) work from a linguistic point of view
• What is difficult about GSL
• What are the differences to other languages
2. Multilingualism for Quality Education: Teaching Enabling Future Teachers to cater for multilingualism in the classroom (ProfaLe Project)

Step 3 (Hands-on Knowledge / Competencies)

- What can a subject teacher do to prevent children from failing to understand tasks due to linguistic difficulties
- How can the learning of German be catered for alongside the subject contents
- Teaching strategies (i.e. scaffolding, language-sensitive teaching)

Step 4: (Reflection and Application)

- Students reflect upon what they have learned and apply their knowledge on the subject in a mini-project

Added Value of Multilingualism through Education for Sustainable Development (MeMe Project)

Background:

• desirable to create education frameworks that cater for multilingualism:
  • that respect the value of multilingual repertoires regardless what they consist of (value of linguistic and cultural diversity)
  • that arrange for continuous language support (both for home languages and educational languages)
  • that provide all members of societies with equal opportunities in educational participation
Added Value of Multilingualism through Education for Sustainable Development (MeMe Project)

Problem:

• working towards a framework for sustainable and inclusive education with regard to linguistic diversity:
  • Research on creating such a framework
  • our knowledge on the connection between EDS and multilingualism
  • the potentially enormous benefits that linguistic awareness in education can bring is to this day,

...at best, fractional.
Added Value of Multilingualism through Education for Sustainable Development (MeMe Project)

Questions to be answered:

1. What role multilingualism plays in sustainable development?
2. How we can generate the relevant knowledge in the area?
3. What needs to change?

To provide a structure in the answering of these questions, the following part employs the three dimensions of sustainable development:
Added Value of Multilingualism through Education for Sustainable Development (MeMe Project)

Thoughts for the Economic Dimension:

- Language skills can be a substantial (economic) benefit on the job market; individual’s RoRs career mobility (likely to even increase alongside increasing internationalization and globalization)

- Question of how multilingual resources can be fostered and catered for sustainably to make them relevant for the job market (challenge here: economic cycles and rapidly changing demands)

- Education systems to identify ways to a) maintain and support home languages, b) cater for quality education in the language(s) of instruction, and c) modern foreign language teaching

- Research needs to be conducted both on multilingualism in education and, perhaps more importantly, on the value of multilingualism for the economy

Added Value of Multilingualism through Education for Sustainable Development (MeMe Project)

Thoughts for the Social Dimension:

• Needs to find the right measure to deal with multilingual realities in a society to help in creating social cohesion, inclusion and participation (highly complex)

• Among numerous streams of research and data needs, the identification and precise description of social resources can be helpful
  • Status of multilingualism within social and cultural capital
  • The role of such capital for optimal sustainable social integration
  • Does integration mean sustainable cohesion?

• Our understanding of the challenges posed by the multilingual reality would improve significantly.
Added Value of Multilingualism through Education for Sustainable Development (MeMe Project)

Thoughts for the Ecological Dimension:

• How can multilingual resources bring benefits to the ecological dimension of sustainable development and to education for sustainable development?

• Research on the influence of multilingualism on our understanding of environmentally-friendly behaviour may be one way...

• How do different linguistic (multilingual) notions of ecology and sustainability correspond, interact and influence the individual? (in his/her ecological behavior...)

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Summary
The Value of Multilingualism in Quality Education for Sustainable Development

1. Research: Multilingualism is an important asset on the job market; in administrative and governance functioning; strong need to maintain and cater for it

2. Teaching: Multilingualism is classroom reality; to provide all children with equal opportunities in accessing education teachers need to be qualified and competent in dealing with challenges of multilingualism

3. Future: need to identify the role and value of multilingualism in sustainable development; strategies in economic, social and ecological dimensions
Thank you very much for your attention 😊
Contents

- Local Responses to Global Challenges
- Empirical Research on Multilingualism as a Resource
- Training Teachers in Preparation for Multilingual Classroom Realities
- Future Research Needs
Background and Theory: The University of Hamburg as a Case

- The University of Hamburg
  - 4th largest university in Germany (by student population)
  - ~42,000 students
  - 12,100 staff
  - 2243 staff in technical and administrative roles
Background and Theory: The Project

**RESEARCH ASSOCIATION**

Multilingualism as a Resource

<table>
<thead>
<tr>
<th>Project I</th>
<th>Project II</th>
<th>Project III</th>
<th>Project IV</th>
</tr>
</thead>
</table>

cf. presentation "Multilingualism in the production of academic discourse“

cf. presentation "Multilingualism in a hospital setting“

cf. presentation "Languages of Instruction - English lingua franca“

cf. presentation "Foreign Language skills as a resource in university governance“

Tobias Schroedler

[Email]

[University Website]
Background and Theory: Migration and Multilingualism

• Great deal of research on multilingualism in educational settings – very little research in institutional setting (esp. public sector)

• Metropolitan areas of Germany: more diverse than ever

• Hamburg’s population consists of migrants from approximately 190 different countries (migrant proportion of approximately 30%) (Federal Statistical Office for Schleswig-Holstein and Hamburg 2015, Gogolin et al. 2015)

Migration ≠ Multilingualism (!)
Background and Theory: Migration and Multilingualism

In numbers:

- Migrants from nearly all recognised countries: 190
- Approximately every second child is born into a ‘migrant’ family
- 30% of Greater Hamburg’s population has a ‘migrant background’
- In Hamburg’s public sector 12.3% have a ‘migrant background’

Question 1: Does a historically monolingual, conventional and state-funded institution reflect the multilingual reality of present-day Germany?
Background and Theory: Language as an asset

- Language skills and concepts of *value & capital*:
  - *Human Capital Theory* (Language skills as a form of human capital, that is needed and valued by employers)
  - *Market Value of Languages* (Language skills have economic value if they help creating monetary capital) (Grin 2002, 2003, 2006)
  - *Social / Cultural Capital* (Language skills increase one’s linguistic capital: access to wider circles of societies & cultures; exploiting one’s linguistic capital to own needs) (Bourdieu 1991, 1997, Martinovic 2011)
  - *Psychic Distance Theory* (Language skills as one of the most important components [or determiners of success] in business internationalisation) (Piekkari et al. 2014)

**Question 2: Are language skills needed, used and valued?**
**Background and Theory: Institutional Governance**

<table>
<thead>
<tr>
<th>Efficiency</th>
<th>Fairness</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Best resource allocation</td>
<td>• A „just“ distribution of resources between social actors</td>
</tr>
<tr>
<td>• Working towards a determined goal</td>
<td>• (Fair) distributive consequences of policy changes</td>
</tr>
<tr>
<td>• Enhancing a certain feature without diminishing another (ideally)</td>
<td>• Who loses / who gains (what, how much,...)?</td>
</tr>
</tbody>
</table>

**Question 3:** Are societal and institutional linguistic diversity recognised? Are language practices in the institution fair and efficient?
Methodology

- Questionnaire survey among all university staff in technical and administrative roles as well as library staff
- Partially programmable online questionnaire tool (Limesurvey)
- Paper&Pencil versions of the questionnaire

Content:
- What is your L1? What languages do you speak? At what level? Where and How have you learned them?
- Do you use languages other than German at work? If so, what languages are these? In what situations?
- Who are you mainly communicate with during your daily work routine? In what languages?
- Would you like to use languages other than German at work more often?
- ...
- Personal Information
Methodology

1. The tool Tobias Schroedler

2. Angaben zu Ihren Sprachkompetenzen

In diesem Abschnitt können Sie Ihre Sprachkompetenz selbst einschätzen. Es geht nicht um absolute Genauigkeit. Entwerten Sie selbst, was Sie in der jeweiligen Sprache können.

3. Wie gut können sie die Sprachen verstehen, wenn sie zugehen?

Ich kann auf...

Bitte markieren Sie für die jeweilige Sprache die Höhe Ihrer Fähigkeiten und Fertigkeiten. Die Abstufungen entsprechen sich von links (1 = wenig Kenntnisse) nach rechts (6 = hohe Kenntnisse).

<table>
<thead>
<tr>
<th>Sprache</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Keine Antwort</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td></td>
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<tr>
<td>Spanish</td>
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<td>Hindi</td>
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</tr>
</tbody>
</table>

4. Wie gut können Sie an Gesprächen teilnehmen?

Ich kann auf...

Bitte markieren Sie für die jeweilige Sprache die Höhe Ihrer Fähigkeiten und Fertigkeiten. Die Abstufungen entsprechen sich von links (1 = wenig Kenntnisse) nach rechts (6 = hohe Kenntnisse).

<table>
<thead>
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</tr>
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<tbody>
<tr>
<td>German</td>
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<tr>
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<tr>
<td>Spanish</td>
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<tr>
<td>Hindi</td>
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</tr>
</tbody>
</table>
## Sample

<table>
<thead>
<tr>
<th>Function</th>
<th>Sample Population</th>
<th>Official Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>661 (29.5%)</td>
<td>2243 (100%)</td>
</tr>
<tr>
<td>Sex</td>
<td>female: 72.8% / male: 27.2%</td>
<td>female: 75% / male: 25%</td>
</tr>
<tr>
<td>Function: Administrative</td>
<td>394 (59.6%)</td>
<td>1325 (59.1%)</td>
</tr>
<tr>
<td>Function: Technical</td>
<td>124 (18.8%)</td>
<td>753 (33.6%)</td>
</tr>
<tr>
<td>Function: Librarian</td>
<td>57 (7.7%)</td>
<td>165 (7.4%)</td>
</tr>
<tr>
<td>Other Function</td>
<td>23 (3.5%)</td>
<td>k.A.</td>
</tr>
<tr>
<td>No response</td>
<td>69 (10.4%)</td>
<td></td>
</tr>
<tr>
<td>Age group &lt;30</td>
<td>10.8%</td>
<td>k.A.</td>
</tr>
<tr>
<td>Age group 30-40</td>
<td>28.1%</td>
<td>k.A.</td>
</tr>
<tr>
<td>Age group 41-50</td>
<td>31.1%</td>
<td>k.A.</td>
</tr>
<tr>
<td>Age group 51-60</td>
<td>25.3%</td>
<td>k.A.</td>
</tr>
<tr>
<td>Age group &gt;60</td>
<td>4.7%</td>
<td>k.A.</td>
</tr>
</tbody>
</table>
How many languages do the participants speak?

Different L1s: 33 // Different languages: 60

- 9 participants named one language
- 140 participants named two languages
- 169 participants named three languages
- 168 participants named four languages
- 175 participants named five languages
# Findings: First Languages

<table>
<thead>
<tr>
<th>L1</th>
<th>Number of Native Speakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>572</td>
</tr>
<tr>
<td>English</td>
<td>19</td>
</tr>
<tr>
<td>Russian</td>
<td>18</td>
</tr>
<tr>
<td>Polish</td>
<td>9</td>
</tr>
<tr>
<td>French</td>
<td>7</td>
</tr>
<tr>
<td>Spanish</td>
<td>6</td>
</tr>
<tr>
<td>Turkish, German Dialect</td>
<td>5</td>
</tr>
<tr>
<td>Ukrainian, Portuguese</td>
<td>3</td>
</tr>
<tr>
<td>Arabic, Bosnian, Bulgarian, Chinese, Dutch, Hungarian, Punjabi, Sign, Swedish, Spanish, Swedish, Ukrainian</td>
<td>2</td>
</tr>
<tr>
<td>Croatian, Czech, Danish, Greek, Iranian, Italian, Japanese, Khmer, Lithuanian, Madagassian, Mazedonian, Norwegian, Rumanian, Turkish</td>
<td>1</td>
</tr>
</tbody>
</table>
Other Languages
## At what proficiency level...

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>mean</th>
<th>SD</th>
<th>min</th>
<th>max</th>
</tr>
</thead>
<tbody>
<tr>
<td>German</td>
<td>608</td>
<td>5,9</td>
<td>0,33</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>English</td>
<td>633</td>
<td>4,33</td>
<td>1,32</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>French</td>
<td>383</td>
<td>2,61</td>
<td>1,27</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Italian</td>
<td>81</td>
<td>2,39</td>
<td>1,19</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Russian</td>
<td>67</td>
<td>3,31</td>
<td>1,94</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Spanish</td>
<td>213</td>
<td>2,55</td>
<td>1,37</td>
<td>1</td>
<td>6</td>
</tr>
</tbody>
</table>
Language Use at Work

Have you used languages other than German at work during the past month? (n=638)

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>71.9% (459)</td>
<td>28.1% (179)</td>
</tr>
</tbody>
</table>

- Englisch: 450
- Französisch: 34
- Spanisch: 27
- Russisch: 12
- Italienisch: 10
- Chinesisch: 4
- Gebärdensprache: 4
- Polnisch: 4
- Portugiesisch: 3
- Türkisch: 3
- Griechisch: 2
- Hebräisch: 2
- Schwedisch: 2
- Arabisch: 1
- Dänisch: 1
- Indonesisch: 1
- Japanisch: 1
- Niederländisch: 1
- Ungarisch: 1
Language Use at Work

Would you like to use languages other than German at work more often? (n=511)

<table>
<thead>
<tr>
<th>Language</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>75.1% (384)</td>
<td>24.9% (127)</td>
</tr>
<tr>
<td>French</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italian</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russian</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- English (340)
- French (89)
- Spanish (81)
- Italian (23)
- Russian (19)
Findings

Can you think of situations in your daily working routine, in which your multilingual repertoire may be useful? (n=554)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>80.9% (448)</td>
<td>19.1% (106)</td>
</tr>
</tbody>
</table>

What resources do we have? Where are they? What are languages actually used for? (see: following slide)
### Situation Responses

<table>
<thead>
<tr>
<th>Situation</th>
<th>Responses</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication with guests from abroad</td>
<td>83</td>
<td>23.45</td>
</tr>
<tr>
<td>Communication with non-German speaking students</td>
<td>124</td>
<td>35.03</td>
</tr>
<tr>
<td>Communication with non-German speaking colleagues</td>
<td>56</td>
<td>15.82</td>
</tr>
<tr>
<td>Consulting / Advising</td>
<td>33</td>
<td>9.32</td>
</tr>
<tr>
<td>Responding to phone calls and emails</td>
<td>48</td>
<td>13.56</td>
</tr>
<tr>
<td>Contact with international partners</td>
<td>65</td>
<td>18.36</td>
</tr>
<tr>
<td>Contact with international service agents</td>
<td>23</td>
<td>6.5</td>
</tr>
<tr>
<td>Website and info-material design in languages other than German</td>
<td>25</td>
<td>7.06</td>
</tr>
<tr>
<td>Presentations</td>
<td>25</td>
<td>7.06</td>
</tr>
<tr>
<td>Research</td>
<td>15</td>
<td>4.24</td>
</tr>
<tr>
<td>other</td>
<td>29</td>
<td>8.19</td>
</tr>
</tbody>
</table>
Discussion: Question 1: Does a historically monolingual, conventional and state-funded institution (Hamburg University) reflect the multilingual reality of present-day Germany?

• Over 30 L1s and over 60 different languages have been identified in the repertoire
  • This shows (to some extent) a ‘multilingual reality’

But:

• A large proportion of the named language skills appears to originate from mainstream secondary education (out of a total of 1712 entries, 1385 are typical MFLs)
• Having migrant population of approximately 30%, coming from 190 different countries, our results do not represent the degree of multilingualism in Hamburg’s population
Discussion: Question 3: Are resources (assets) used and allocated efficiently & fair?

• 80.9% of staff indicated that their multilingual repertoire is useful in their daily work
  ➢ clear indication of a certain efficiency

• Data shows that LOTE/LOTG have higher preference than the work reality
  ➢ Possibly not the highest level of fairness (on the individual level)

• In general: very positive attitudes towards using LOTG/LOTE in work
Literature


