

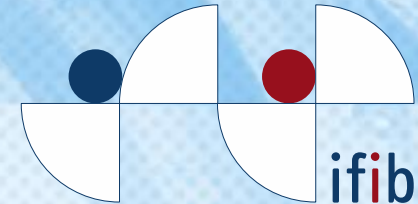


ZeMKI

Centre for Media,
Communication and
Information Research



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Bremen GmbH

Data Use in Schools – A Cross-Country Survey

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Overview

- Data Use Project Context
- Survey Design
- Survey Analysis Process
- Results: Country-specific and Cross-country Highlights

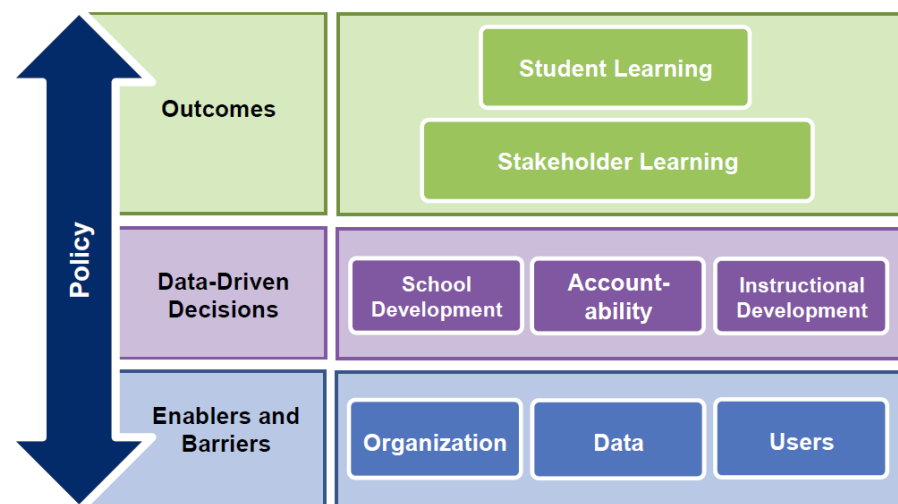
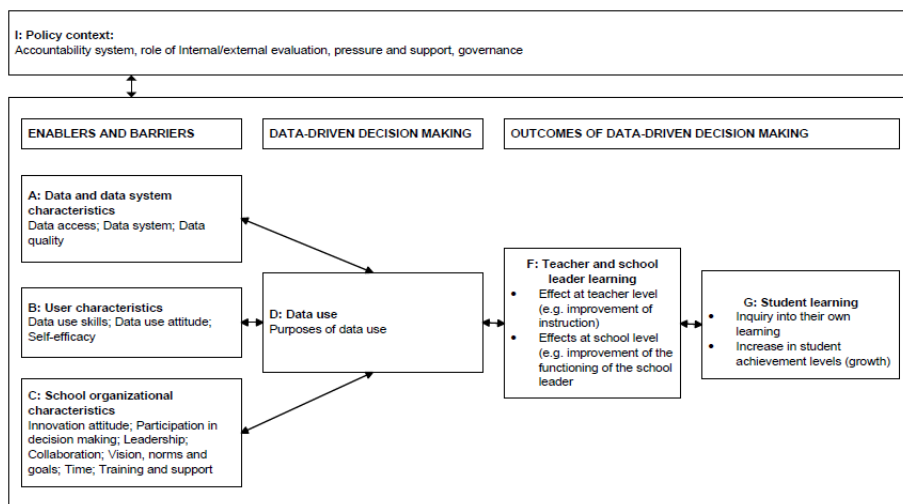
The Data Use Project

- **Comenius Life Long Learning Programme**
- **Partners:** United Kingdom (SSAT), Poland (PCG Polska), Netherlands (U Twente), Lithuania (MDC), Germany (ifib)
- **Goal:** Develop professional learning communities within schools and qualify them in their use of tools that support effective data use for the improvement of educational outcomes



From State-of-the-Art to Data Use Survey (1)

- Preliminary study
 - Interviews with teachers and (assistant) school leaders from 2 piloting schools in each country
 - Comparative analysis and development of the data use theory of action and data use framework



From State-of-the-Art to Data Use Survey (2)

- Survey items (78) were based on the data use framework
- Participants were asked to rate items by their accuracy or frequency

Survey Questions (1)

Data Accessibility		Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Not Applicable	
1. I have access to student data within an information technology		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2. I can go to all relevant students	User Skills		Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know	Not Applicable
3. I have access that helps	18. I have the skills to change my teaching based on data	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Data about students at beginning	19. I am able to use data to diagnose student learning needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. As new students in the middle of the year, they are not in a timely	20. I know the meaning of basic assessment terms and concepts (e.g., inference, validity, reliability)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	21. I know how to interpret the assessment reports that I am given	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	22. I feel comfortable interpreting data presented graphically	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Survey Questions (3)

Using Data for Instructional Development	Rarely or Never	Yearly	Several Times per Year	Monthly	Weekly	Several times a week
How often do you use student learning data for the following activities?						
66. To set learning goals for individual students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
67. To determine which knowledge and skills students do or do not possess	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
68. To identify progress of students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
69. To tailor instruction to individual student needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
70. To determine the pace of my lessons	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


Steps of the statistical survey analysis

- The responses from **368 teachers** were analyzed in 3 steps

Step 1: Creation and comparison of charts

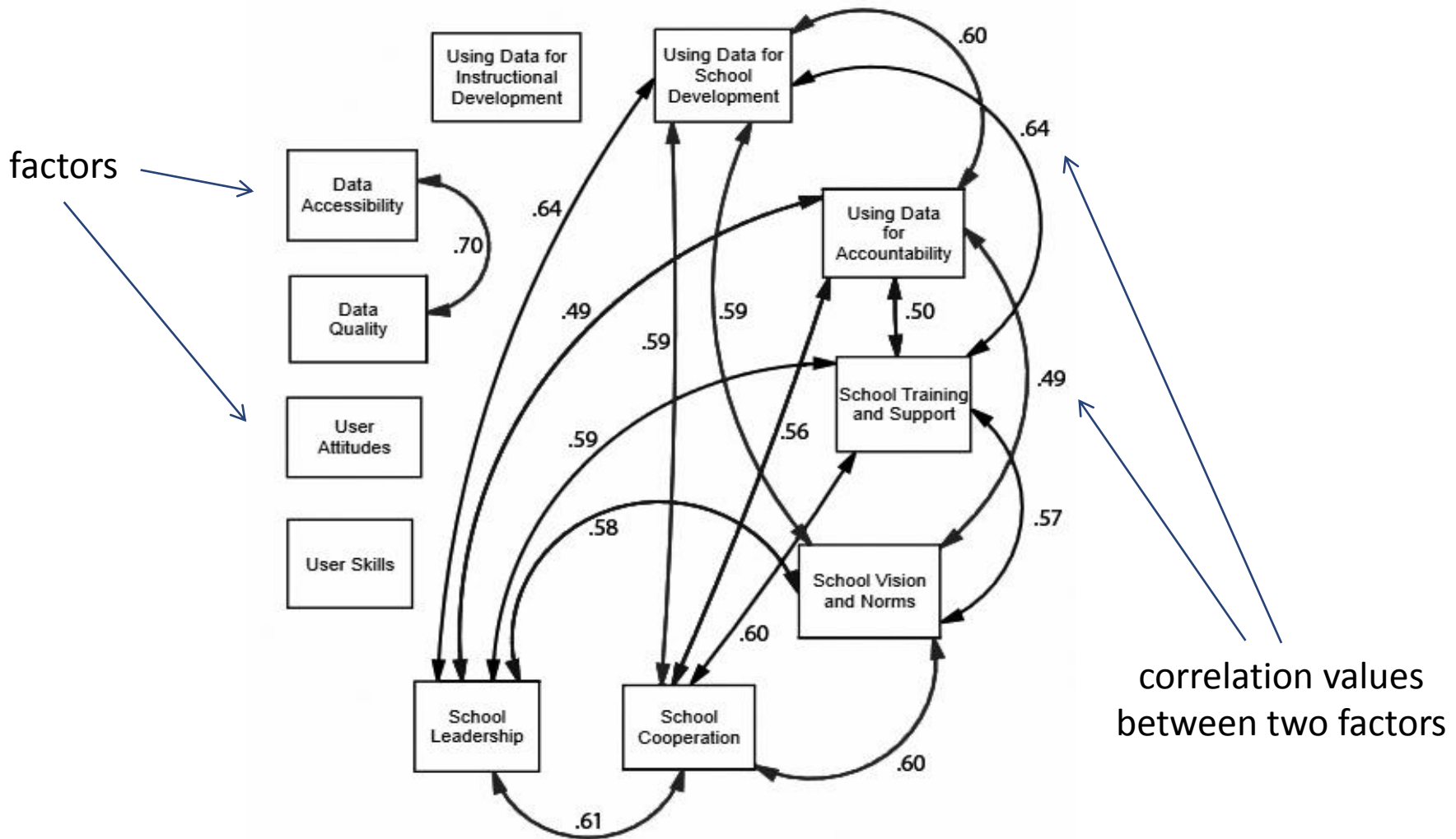


Step 2: Reducing the number of items to be analyzed and checking correlations



Step 3: Finding models that show each country's most meaningful set of correlations

Finding the „Model of Best Fit“ (2)



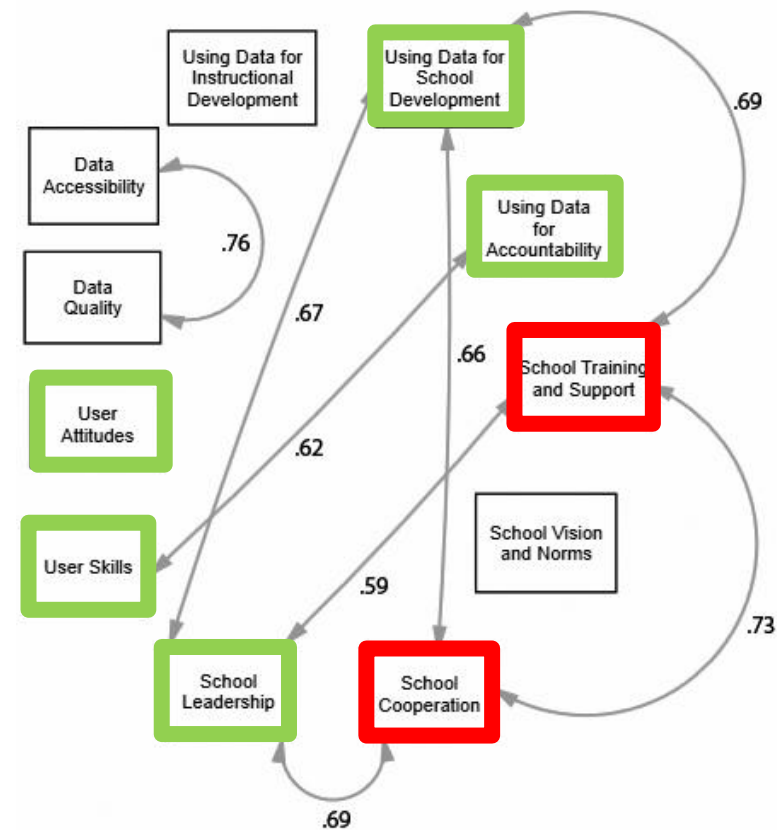
Highlights for United Kingdom (n=63)

- Rather positive ratings from 1.5 – 2.2
- Advantages:
 - Well rated **User Attitudes** and **School Leadership**
- Challenges:
 - **School Visions and Norms** and **Data Quality** are rated comparatively low and are interdependent
 - **School Training and Support** is ranked lowest and linked to 3 important other factors



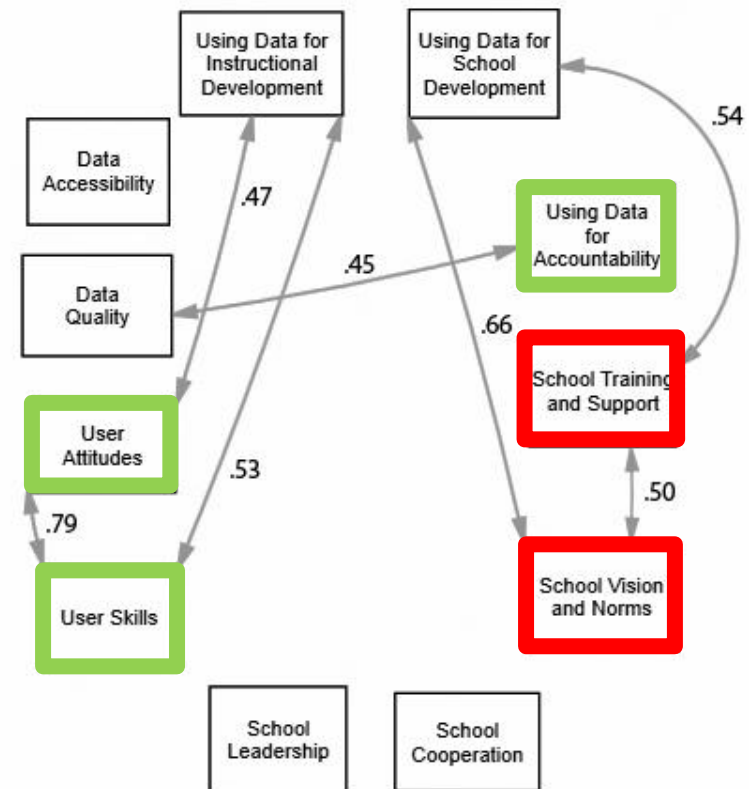
Highlights for Poland (n=64)

- Positive ratings from 1.7 – 2.2
- Advantages:
 - Well rated **User Attitudes** and **User Skills** (but only interdependent with **Use for Accountability**)
- Challenges:
 - **School Cooperation** and **School Training and Support** are strongly interdependent and rated lowest, but also linked to the very well rated factors **School Leadership** and **Using Data for School Development**



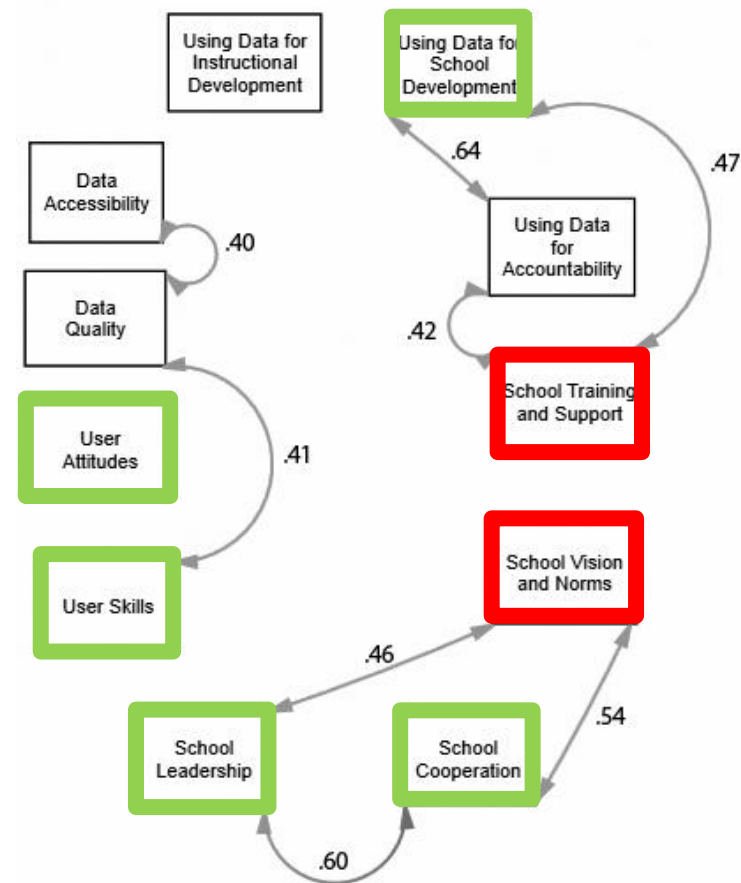
Highlights for the Netherlands (n=46)

- Average ratings from 2.0 – 2.6
- Advantages:
 - Well rated **User Attitudes** and **User Skills** that correlate with each other and **Use for Instructional Development**
- Challenges:
 - **School Vision and Norms** and **School Training and Support** are rated lowest, are interdependent, and correlate with **Use for School Development**



Highlights for Lithuania (n=173)

- Positive ratings from 1.6 – 2.2
- Advantages:
 - Well rated User Attitudes, User Skills (which correlate with Data Quality) and School Leadership
- Challenges:
 - **School Vision and Norms** are rated low, but correlate with well rated **School Leadership** and **School Cooperation**
 - **School Training and Support** is rated low and correlates with important factors for Lithuanian context



Highlights for Germany (n=52)

- Average ratings from 2.2 – 3.3 (except **User Attitudes** with 1.6)
- Advantages:
 - Well rated and interdependent **User Attitudes** and **User Skills** that correlate with **School Visions and Norms**
- Challenges:
 - **Data Accessibility** and **School Training and Support**
 - Improvement of **Use for School Development** via **Leadership, Vision & Norms** and **Cooperation?**

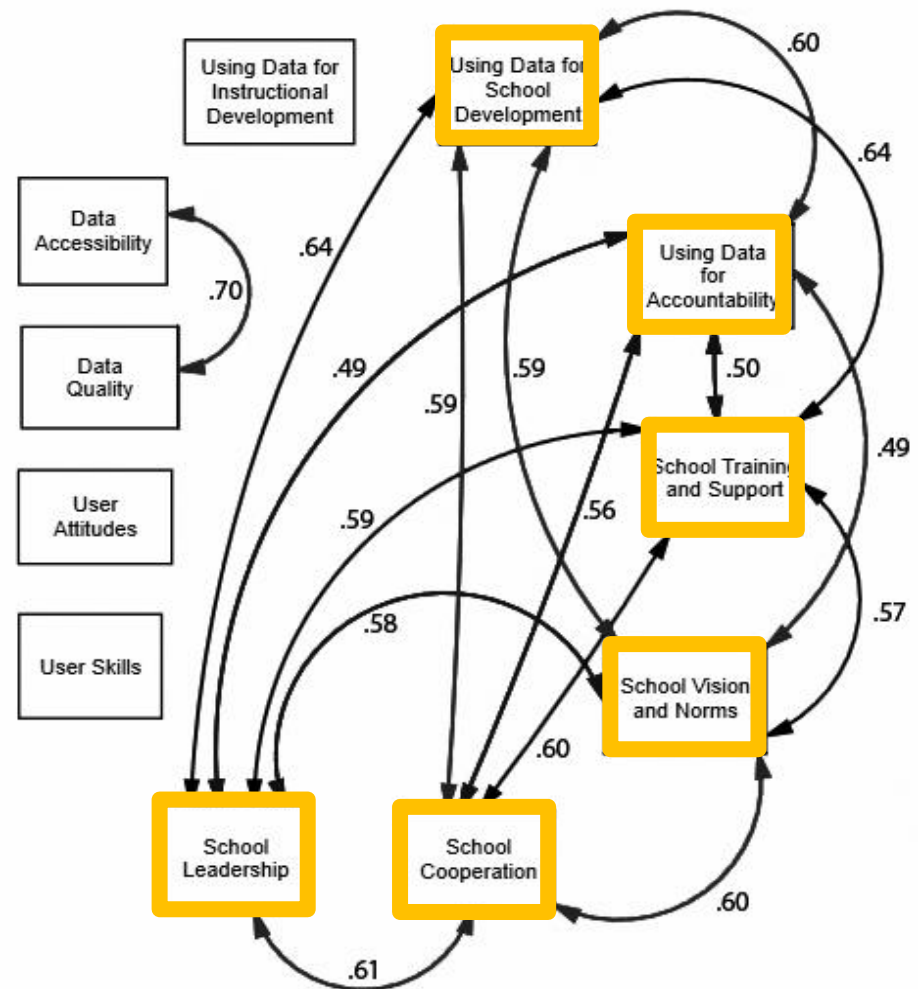


Cross-Country Highlights (1)

- More than 50 percent of the respondents agreed or strongly agreed that...
 - “...it is important to use data to diagnose individual student learning needs.”
 - “...data can offer information about students that was not already known.”
 - “...[their] principal or assistant principal(s) encourage data use as a way to support effective teaching”
 - “...[they] would like to collaborate more with educators about using data”

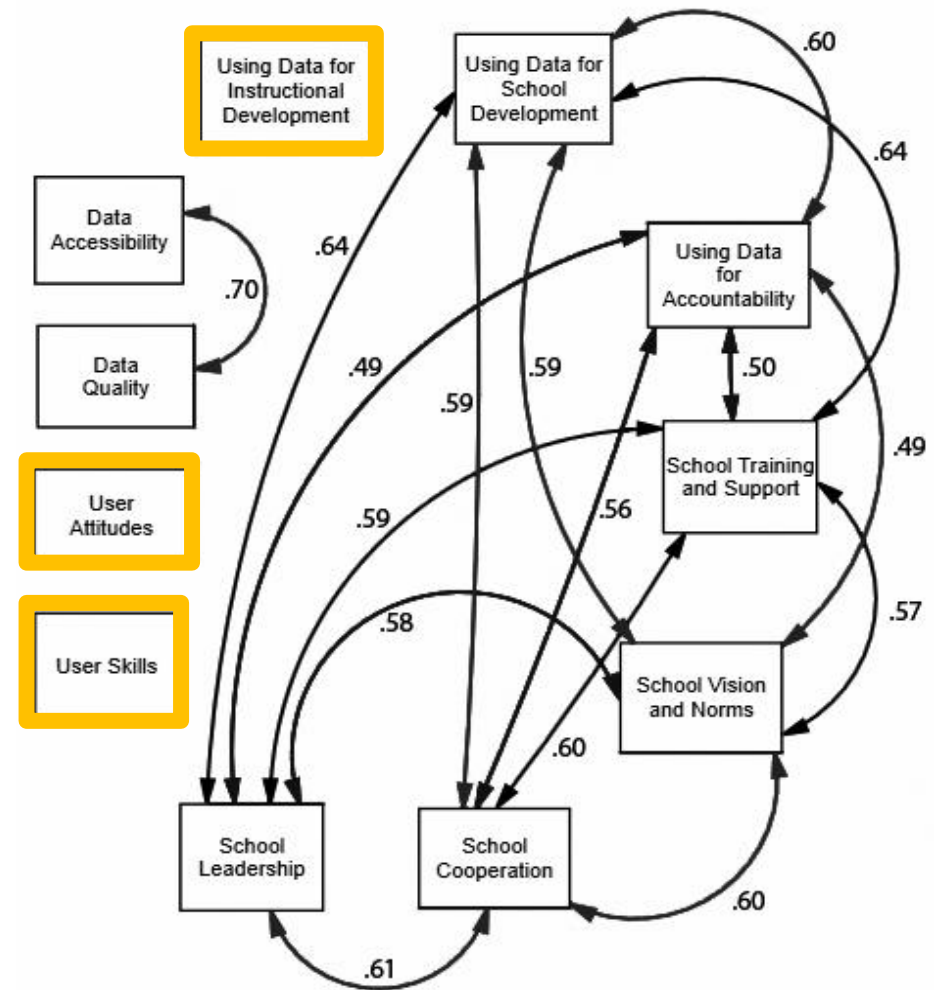
Cross-Country Highlights (2)

- Factors on the school side are all interdependent
- **School Leadership:** support from school leaders is a necessary condition for data use in schools



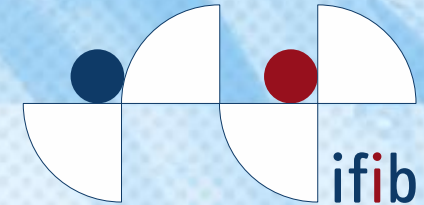
Cross-Country Highlights (3)

- 3 factors are not linked at all and thus do not play a significant role in data use in these schools, yet
 - **User Attitudes**
 - **User Skills**
 - **Using Data for Instructional Development**



Summary

- Results show common patterns in-between countries but also country-specific challenges due to governance structures
- Results show that the DATAUSE project is a topic of interest among surveyed teachers
- The project aims at significant gaps in the piloting schools' current data use culture (i.e. training and support + individual school barriers)
- **Next steps:** Course pilot and re-administration of the survey



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Thank you!

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