



Lifelong Learning Programme



comenius



DELECA

DEvelopment LEadership CApacity
for Data-informed School Improvement

Module 1

Meaning and aim of working with data







Objectives and outcomes – Module 1

- To motivate participants to work with data in their own school
- To develop participants understanding of the meaning and purpose of work with data in schools
- To help participants recognise the need to work with data
- To encourage participants to view their school “through” the lens of local data
- To clarify how self-evaluation, as a form of working with data, can contribute to the development of school

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The school context – the need to work with data

- Increasing decentralization and autonomy – new requirements and needs of schools, pressure on quality, self evaluation of schools. „...Movement towards result-orientation, decentralization and accountability.“

The basis for curriculum of the Deleca course:

- the policy context of accountability and focus on results of learners;
- the critical reactions on this policy;
- the distinction between an external accountability perspective and an internal development perspective;
- the necessity of intelligent accountability systems, including broad self-evaluation.

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Objectives of the course (5 Modules)

Module 1	Module 2	Module 3	Module 4	Module 5
Purpose	Data collection	Analysis and interpretation	Action	Creating a culture of inquiry
Focusing and reframing problems for inquiry	Accessing or searching for data and evidence	Interpretation of the data	Planning: implication for action	Invitation to discuss alternative perspectives

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What are data?

Terms as data, information, knowledge, evidence ...

- *Data* - symbolic representations of figures and quantities.
- *Information* - data that are processed to be useful, providing answers to "who", "what", "where", and "when" questions
- *Knowledge* - the application of data and information, give answers to "how" questions
- *Understanding* - the appreciation of "why"
- *Wisdom* - concerns an evaluated understanding (Ackoff, 1989).

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What are data?

- Data - raw facts
 - Information - a collection of facts, which are organized in a specific context
 - Knowledge - a personal ability, which is the product of information, the individual experiences and skills, and the attitude ...
- (Weggeman, 1997)

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What are data?

In this project (OLS, 2011):

Data in a broad sense: data – words, numbers, and observations – as information that is collected and organized in a systematic way by educators and can be used to make instructional or organizational decisions.

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Evidence-based practice

- *Evidence* - information that verifies effective practice (Hargreaves, 1996) „... data as evidence for educational decision-making ...data-informed educational leadership“...
- Evidence-based education requires: (1) utilizing existing evidence and (2) establishing new evidence where current evidence is insufficient or non-existent (Davies, 1999)
- empirical evidence versus practical knowledge

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What sources of data are considered?

- Various sources of data - in terms of their validity and reliability
- Quantitative and qualitative data

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What are data related to?

- *Student demographic* (enrolment, attendance, dropout rate, ethnicity, gender,....)
- *Perceptions of learning environment*, values and beliefs, attitudes, observations . . . (e.g., held by a school's teachers).
- *Student learning*: standardized tests, norm/criterion-referenced tests, teacher observations, authentic assessments, learning skills and work habits, student work samples.
- *School processes*: descriptions of programs, instructional strategies, classroom practices
- *Teacher characteristics, behaviour and professional learning*: teacher assignment, qualifications, retention, participation in professional development
- *Environment data* such as parent/community surveys (Copland et al, 2009).

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What are data related to?

The CIPO-MRMM framework

	Context	Input	Process	Output
Macro				
Regional				
Meso				
Micro				

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Data-wise (literate) leadership

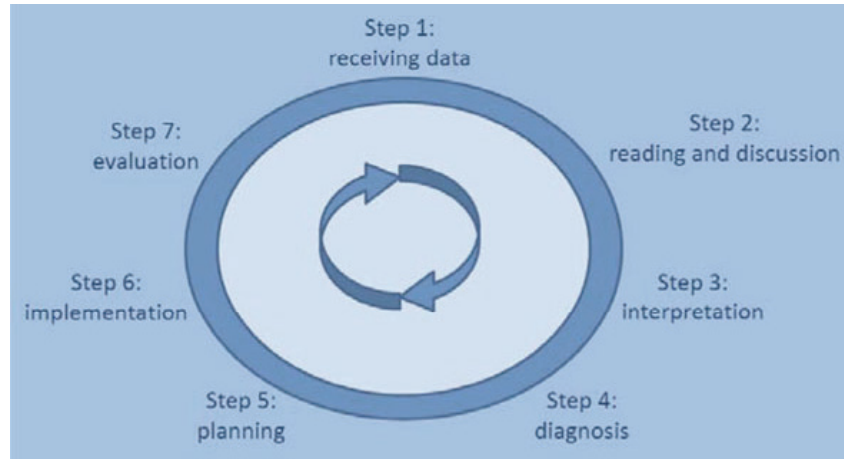
- data literacy = ... the ability to ask and answer questions about collecting, analysing, and making sense of data“.

Three capacities for leaders in the data-rich world:

- *Develop an inquiry habit of mind.* School leaders do not have to become researchers themselves, but they need to be able to read, understand and interpret data...
- *Become data literate.* Leaders will need to be aware of needing different data for different purposes, to recognize sound and unsound data, to be knowledgeable about statistical and measurement concepts, ...
- *Create a culture of inquiry.* Leaders will need to involve others in interpreting and engaging with the data, ... (Earl and Katz, 2002, 2006)

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Steps in school feedback use (Vanhoof et al., 2013).



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Data-wise (literate) leadership

- *Building Organizational Cultures that Enable and Motivate*
- *Engaging in Cycles of Data-Informed Inquiry and Action.*

(Copland et al., 2009)

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