Attachment 1: Original NinU-Raster (Stinken-Rösner et al., 2020)

	A. Reasoning about science-related contexts	B. Learning scientific content	C. Doing science	D. Learning about science
I. Embrace diversity	1. Which **science-related contexts** are stimulating and relevant for all learners?	1. Which **contents** are relevant for all learners?	1. Which **processes and procedures of doing science** are relevant for all learners?	1. Which **aspects of learning about science** are relevant for all learners?
	2. Which dimensions of diversity play a role in **reasoning about the science-related context**?	2. Which dimensions of diversity play a role in **learning the scientific content**?	2. Which dimensions of diversity play a role for **doing science**?	2. Which dimensions of diversity play a role for **learning about science**?
	3. Which individual conceptions, skills, and beliefs of learners are related to **(reasoning about) the science-related context**?	3. Which individual conceptions, skills, and beliefs of learners are related to **learning the scientific content**?	3. Which individual conceptions, skills, and beliefs of learners are related to **doing science**?	3. Which individual conceptions, skills, and beliefs of learners are related to **learning about science?**
	4. Which knowledge, skills, and experiences of learners can be seen as resources for **(reasoning about) the science-related context**?	4. Which knowledge, skills, and experiences of learners can be seen as resources for **learning the scientific** content?	4. Which knowledge, skills, and experiences of learners can be seen as resources for **doing science**?	4. Which knowledge, skills, and experiences of learners can be seen as resources for **learning about science**?
II. Recognize barriers	1. What are barriers and/or challenges for learners when **reasoning about the science-related context**?	1. What are barriers and/or challenges for learners when **learning the scientific content**?	1. What are barriers and/or challenges for learners when **doing science**?	1. What are barriers and/or challenges for learners when **learning about science**?
III. Enable participation	1. How can **(reasoning about) the science-related context** be made accessible to all learners?	1. How can **(learning) the scientific content** be made accessible to all learners?	1. How can **doing science** be made accessible to all learners?	1. How can **learning about science** be made accessible to all learners?
	2. How can the existing resources be used to overcome the barriers or challenges when **reasoning about the science-related context**?	2. How can the existing resources be used to overcome the barriers or challenges when **learning the scientific content**?	2. How can the existing resources be used to overcome the barriers or challenges when **doing science**?	2. How can the existing resources be used to overcome the barriers or challenges when **learning about science**?
	3. How can all learners be actively engaged when **reasoning about the science-related context**?	3. How can all learners be actively engaged when **learning the scientific content**?	3. How can all learners be actively engaged when **doing science**?	3. How can all learners be actively engaged when **learning about science**?
	4. How can (all) learners be encouraged to co-construct and collaborate when **reasoning about the science-related context**?	4. How can (all) learners be encouraged to co-construct and collaborate when **learning the scientific content**?	4. How can (all) learners be encouraged to co-construct and collaborate when **doing science**?	4. How can (all) learners be encouraged to co-construct and collaborate when **learning about science**?
	5. How can all learners be individually supported when **reasoning about the science-related context**?	5. How can all learners be individually supported when **learning the scientific content**?	5. How can all learners be individually supported when **doing science**?	5. How can all learners be individually supported when **learning about science**?