**Designing the Education for European Sustainable Development (EESD) Courses**

In European Assembly for a Sustainable Europe (EASE) the Saxion research group Progressive Education will develop and evaluate pre- and in-service teacher courses that equip primary teachers and students with the knowledge and skills needed to deliver lessons pertaining to Education for European Sustainable Development (EESD).  In EASE we build on the principles and goals of an educational approach that is based on the epistemic theory of deliberative democracy. This theory aims at stimulating autonomy of citizens, takes into account the complexity of issues relevant to the EGD, and recognizes the controversiality of such issues, but also understands what kind of solutions are possible or what kind of solutions have already been developed.

To organize the professional development, literature on effective teacher professionalization has been studied and compared. General review studies on teacher professionalization and more specific studies focusing on professionalization regarding societal-technological issues have been examined. Based on this, 7 effective principles have been established, which form the basis for the design of teacher professionalization.

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| **Principle** | **Sources** |
| 1. The professional development integrates societal-technological theory and practice systematically. | Maandag et al. (2017)  Sims et al. (2023)  Timperley et al. (2007)  Van Driel et al. (2012) |
| 2. The professional development stimulates active learning focused on the daily work of teachers (designing education, assessment, observation, reflection, analyzing student work, etc.). | Maandag et al. (2017)  Sims et al. (2023)  Timperley et al. (2007) |
| 3. The professional development is focused on collaborative learning. Teachers develop their knowledge and skills of societal-technological issues and student learning about them through interaction, discussion, and group reflection. | Kinskey & Zeidler (2020)  Lee & Yang (2019)  Maandag et al. (2017)  Mukagihana et al. (2021)  Van Driel et al. (2012) |
| 4. The professional development is coherent in terms of goals, content, and design, and is based on a 'theory of improvement' that specifies how the elements of professionalization relate to each other and to the goals. | Maandag et al. (2017)  Sims et al. (2023)  Timperley et al. (2007)  Van Driel et al. (2012) |
| 5. The professional development provides in-depth subject matter knowledge related to the societal-technological issues being addressed. | Maandag et al. (2017)  Mukagihana et al. (2021)  Sims et al. (2023)  Timperley et al. (2007)  Van Driel et al. (2012) |
| 6. The professional development includes modeling societal-technological teaching practices. Teachers see and experience how societal-technological education is implemented in practice and receive explanations about related knowledge, skills, and attitudes of the teacher. | Maandag et al. (2017)  Evagorou & Mauriz (2017)  Gray & Bryce (2006)  Leung (2021)  Sims et al. (2023)  Timperley et al. (2007) |
| 7. The professional development includes redesigning and implementing societal-technological education. Consequently, it provides opportunities to observe oneself and others and to give and receive theory-informed feedback. | Foulk et al. (2020)  Kinskey & Zeidler (2020)  Lee & Yang (2019)  Leung (2021)  Schnellert et al. (2008)  Sims et al. (2023)  Timperley et al. (2007)  Van Driel et al. (2012) |

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