

Additional file 1: Contents of Official Curricula for elementary schools that can be explored using the described activities.

Activity	Contents	Country
Intra-specific diversity	Introduction to evolution <i>.understanding and recognizing intra-specific biodiversity</i>	Ca; UK
	Human body and self-knowledge <i>.parts of human body</i> <i>.recognition of child's features and comparison with other people</i>	Br; Ca; Fr; Pt; UK Pt; UK; Mz
	Recognition and development of respectful attitudes towards morphological and cultural differences between humans	Mz; Pt; Br
	Characteristics and changes in organisms and populations	Ca; Fr; USA
Heredity and genealogical trees	Familiar relationships <i>.family members</i> <i>.genealogical trees and genealogies</i>	Br; Fr; Pt Pt
	Time scale and time units	Br; Pt
	Inheritance	Fr; UK
	Reproduction and life cycles	Br; Fr; USA
	Characteristics and changes in populations	USA
Natural selection	Ecological interactions <i>.types of resources</i> <i>.species requirements</i> <i>.biological Interactions</i> <i>.food webs and food chains</i> <i>.environmental changes</i>	Fr; USA Ca; Fr; Pt Br; Ca; Fr; Pt; UK Br; Ca; Fr; Pt; UK Ca; Fr; USA
	Humans and the environment <i>.impact of human actions in the environment</i> <i>.importance of nature preservation</i> <i>.measures to protect nature and biodiversity</i> <i>.the importance of intra-specific biodiversity to species preservation</i> <i>.science and technology in local challenges</i>	Br; Ca; Fr; Mz; Pt Br; Ca; Fr; Mz; Pt Fr; Mz; Pt Ca Br; USA
	Introduction to evolution <i>.adaptation</i> <i>.species features and its relation to the environment</i> <i>.characteristics and changes in populations</i>	UK Ca; Fr Br; Ca; Fr; Pt; UK; USA USA
Genetic drift	Ecological interactions <i>.types of resources</i>	Fr; USA

	<i>.species requirements</i>	Ca; Fr; Pt
	<i>.environmental changes</i>	Ca; Fr; USA
	Humans and the environment	
	<i>.impact of human actions in the environment</i>	Br; Ca; Fr; Mz; Pt
	<i>.importance of nature preservation</i>	Br; Ca; Fr; Mz; Pt
	<i>.measures to protect nature and biodiversity</i>	Fr; Mz; Pt
	<i>.the importance of intra-specific biodiversity to species preservation</i>	Ca
	<i>.science and technology in local challenges</i>	USA
	Introduction to evolution	UK
	<i>.characteristics and changes in populations</i>	USA
	Growing and taking care of plants	Fr; Pt; UK
Systematics	Taxonomy and species' features	Br; Ca; Fr; Pt; UK; USA
	Understanding and recognizing biodiversity	
	<i>.inter-specific biodiversity</i>	Br; Ca; Pt; UK; USA
	Time scale and time units	Br; Pt
	Introduction to evolution	UK

Countries (and reference for the Official Curricula) are: Br - Brazil (Brasil. Secretaria de Educação Fundamental 1997; Espírito Santo. Secretaria de Estado de Educação 1997), Ca - Canada (Ministère de l'Éducation 2009), Fr - France (Ministère de Éducation Nationale 2012), Mz - Mozambique (INDE/MINED 2003), Pt - Portugal (Ministério da Educação 2001, 2004), UK - United Kingdom (Department of Education 2012) and USA - United States of America (NRC 1996).