

# Education that leaves no one behind

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**Persistently widespread poverty around the world, climate change, the loss of biodiversity, environmental pollution, a lack of gender equality and many other issues all indicate that learning processes need to take place in order for sustainable development to progress, both globally and nationally.**

The Sustainable Development Goals (SDGs) agreed by the United Nations as the 2030 Agenda give education an extremely high status internationally. Promoting education is listed as the fourth goal, after eliminating poverty, eradicating hunger and safeguarding health. There is good reason for this as there is a clear link between the level of education and the prevention of poverty and promotion of personal health. Little or no formal education goes hand in hand with low income and below-average health – which also impacts on life expectancy.<sup>1</sup> However, an improvement in living standards does not only rely on education being provided: the quality and level of this education are also key. Little is gained if, for example – as in Egypt – more than 98% of children attend primary school but there are often 75 pupils in a class and a third of children at some schools are unable to read or write after six years of schooling.<sup>2</sup> This means it

is crucial not only to promote access to education for all, but – as signalled by the title of Goal 4 in the 2030 Agenda – to focus on the importance of quality education.

In this context, the whole of Goal 4 in the 2030 Agenda is also of interest to Germany. If it were only about access to formal education, the country would easily fulfil the requirements. After all, it is compulsory for all children and young people to attend school for at least nine years as part of the state's duty to provide education, and this obligation is indeed met. In almost all cases, this is supplemented by compulsory school (or vocational college) attendance until the age of 18. However, there are no uniform regulations covering all of the federal states.

<sup>1</sup> Mirowsky, J., Ross, C. E. (2003): Education, Social Status, and Health, New York.

<sup>2</sup> Elsayad, F., de Haan, G. (2016). "Grundschule in Ägypten. Realität und Versuche einer Reform". In: Pädagogische Rundschau 70 (4), pp. 425–438.

### Education in Germany

At first glance, the indicators used for the German Sustainable Development Strategy may appear to confirm the quality of education. According to the Indicator Report 2016 on Sustainable Development in Germany, the indicator for the quality of education in Germany is that the highest possible number of 18- to 24-year-olds be enrolled at a school or higher education institution, be completing a training programme, or have further education qualifications. The European Union target is for this proportion to be 90%. This figure is already exceeded in Germany.<sup>3</sup> Germany also surpasses the target set by the European Union for the number of 30- to 34-year-olds with a tertiary or post-secondary qualification, which is the second education indicator.<sup>4</sup> All-day care for children under the age of five is the only area where Germany's performance falls substantially short of the targets.<sup>5</sup>

Consequently, the overall balance concerning sustainable education is not entirely positive for a country which sees itself as a leading nation for education or indeed a knowledge society. One

example of this is the issue of educational equity for people of different social status and from a range of family backgrounds. The performance of Germany's formal education system cannot be considered (internationally) excellent in this field. Germany regularly receives OECD reports stating that equal opportunities – especially for socially disadvantaged schoolchildren and those from migrant families – remain below the OECD average, despite notable positive developments in recent years.<sup>6</sup> Young people from socially disadvantaged families are far less likely to achieve an advanced school-leaving certificate (Abitur) than those from well-educated families – and much more likely to belong to the group with no academic qualifications at all. Children from weaker socio-economic classes are also more likely to be among those with low – or no – academic qualifications than children of parents who have an advanced school-leaving certificate or a university degree.<sup>7</sup> Participation in higher education continues to correlate strongly with background. This means, for instance, that a very low percentage of students have parents with no tertiary qualifications.<sup>8</sup>

<sup>3</sup> Federal Statistical Office (2017): "Nachhaltige Entwicklung in Deutschland. Indikatorenbericht", p. 28.

<sup>4</sup> Ibid., p. 30 f.

<sup>5</sup> Ibid., p. 32 f.

<sup>6</sup> Agasisti, T. et al. (2018): "Academic resilience: What schools and countries do to help disadvantaged students succeed in PISA", OECD Education Working Papers, No. 167, OECD and the sustainability indicator "Foreign school leavers": Federal Statistical Office 2017, p. 68 f.

<sup>7</sup> Baumert, J., Maaz, K., Lühe, J., Schulz, S. (2018): "Bildungsungleichheit und Bildungsarmut – Der Beitrag von Large-Scale-Assessments". In: Quenzel G., Hurrelmann K. (ed.): Handbuch Bildungsarmut. Springer VS, Wiesbaden.

<sup>8</sup> Autorengruppe Bildungsberichterstattung (2018): "Bildung in Deutschland. Ein indikatorengestützter Bericht mit einer Analyse zu Wirkungen und Erträgen von Bildung", Bielefeld. Available at: <https://www.bildungsbericht.de/de/bildungsberichte-seit-2006/bildungsbericht-2018/pdf-bildungsbericht-2018/bildungsbericht-2018.pdf> (last accessed: August 2018)

## SUSTAINABILITY REPORTING AT HIGHER EDUCATION INSTITUTIONS

Where can the idea of sustainability be better cultivated than at higher education institutions? Here, those who will make the decisions later discuss, research and develop. Therefore it recently became possible for higher education institutions to transparently report on how they consider and advance environmental, social and economic issues in a holistic way, be it in the area of research and teaching, in day-to-day operations or with regard to how they introduce sustainable ideas to society.

In 2015, the RNE got together with around 50 higher education institution representatives and the joint project

"Sustainability at Higher Education Institutions: develop - network - report" (HOCH-N) to develop a standard with which universities and higher education institutions could document and further develop their achievements in the area of sustainability. Following a testing period, the alpha version became available in April 2018 and guidelines on its application are currently being developed. The Sustainability Code for Higher Education Institutions is based on the Sustainability Code and comprises 20 criteria. In relation to criterion 17 "Human Rights", for example, the University of Tübingen explains how it raises awareness of this topic with

Tübingen Human Rights Week. Among other things, the University of Bayreuth demonstrates how sustainability is enshrined in its teaching with study courses such as Philosophy and Economics or International Economics and Development. The Freie Universität Berlin lists 457 research projects and 641 teaching events related to sustainability. Up to July 2018, seven higher education institutions had submitted a declaration of conformity to the new standard.

For further information, please see [www.deutscher-nachhaltigkeitskodex.de](http://www.deutscher-nachhaltigkeitskodex.de)

However, sustainable development is about much more than social welfare, sound career prospects and good opportunities in life. The ecological and economic aspect of sustainability must also be considered. However, this is problematic. As a rule, those with more advanced academic qualifications have a greater knowledge of environmental problems and are more sensitive to unfair living conditions.<sup>9</sup> At the same time, this section of the population also has above-average living space and energy usage, is more like to fly – and fly further – owns larger

cars, and so on.<sup>10</sup> In short, the higher the level of education, the worse the carbon footprint and the more resources are consumed. This is, of course, not an argument to reduce the number of advanced academic qualifications. However, it is a clear signal that these indicators alone do not stand for sustainable development as regards resource usage, ecological impacts, etc. In fact, the opposite is true. Viewed across the entire population, higher academic qualifications tend to prevent precarious living conditions, meaning that they contribute towards social justice

9 BMU: Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (2017): "Naturbewusstsein 2017. Bevölkerungsumfrage zu Natur und biologischer Vielfalt". Available at: [https://www.bmu.de/fileadmin/Daten\\_BMU/Pool/Broschueren/naturbewusstseinsstudie\\_2017\\_de\\_bf.pdf](https://www.bmu.de/fileadmin/Daten_BMU/Pool/Broschueren/naturbewusstseinsstudie_2017_de_bf.pdf) (last accessed: August 2018) and BMUB/UBA: Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety/Federal Environment Agency (2016): "Umweltbewusstsein in Deutschland 2016. Ergebnisse einer repräsentativen Bevölkerungsumfrage". Available at: [https://www.umweltbundesamt.de/sites/default/files/medien/376/publikationen/umweltbewusstsein\\_deutschland\\_2016\\_bf.pdf](https://www.umweltbundesamt.de/sites/default/files/medien/376/publikationen/umweltbewusstsein_deutschland_2016_bf.pdf) (last accessed: August 2018)

10 Kleinhüchelkotten, S., Neitzke, H.-P., Moser, St. (2016): "Repräsentative Erhebung von Pro-Kopf-Verbräuchen natürlicher Ressourcen in Deutschland (nach Bevölkerungsgruppen)", Dessau/Rosslau and Bruderer Enzler, H., Diekmann, A. (2015): Environmental Impact and Pro-Environmental Behavior: Correlations to Income and Environmental Concern. ETH Zurich Sociology Working Papers, No. 9. Available at: <https://econpapers.repec.org/paper/etswpaper/9.htm> (last accessed: August 2018)

and help to foster this aspect of sustainable development. Having said this, further work is needed to enable sustainable development processes to arise from sustainable education. In other words, sustainable education must be linked with education for sustainable development.

#### **Education for sustainable development in Germany**

It comes as no surprise then that Goal 4.7 of the 2030 Agenda explicitly cites the objective of ensuring by 2030 that everyone has the skills needed to promote sustainable development.<sup>11</sup> This is what is meant by education for sustainable development (hereinafter: ESD). The importance of ESD was emphasised in the final document of the United Nations Conference on Environment and Development held in Rio back in 1992. Chapter 36 of the document talks about the need for environmental education and awareness because a mental shift is a prerequisite for sustainable development (Agenda 21, 1992). Technical innovations which conserve resources and a focus on sustainability in both politics and the business world will only come about if all players possess knowledge, acceptance and the will to change. This means it is crucial to initiate

learning processes which take a close look at sustainable (and unsustainable) development.

In Germany, some initial efforts were made to establish ESD at schools between 1999 and 2008 with the model programmes for ESD of the Federal–State Commission for Educational Planning and Research Promotion (BLK).<sup>12</sup> During this period, ESD consisted of merging traditions – primarily those of environmental education, but also of global learning – and continuing them with a focus on the aspects of sustainable development. Although ten to 20 per cent of schools providing a general education in Germany were incorporated into these schemes, they did not have a widespread impact or systematically integrate ESD into content frameworks or teacher training. In most cases, the activities did not go beyond the level of individual school projects. At the same time, a substantial proportion of ESD was – and is – delivered by organisations other than schools. In 2002, the United Nations was unable to identify any major international progress since the 1992 Rio Earth Summit. This prompted the organisation to launch the UN Decade of Education for Sustainable Development, with UNESCO as the lead agency, for the period from 2005 to 2014.<sup>13</sup> Germany was heavily involved

11 United Nations (2015): "Transforming our world: the 2030 Agenda for Sustainable Development", New York. Available at: <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf> (last accessed: August 2018)

12 de Haan, G., Harenberg, D. (1999): "Bildung für eine nachhaltige Entwicklung", Bonn, Bund-Länder-Kommission für Bildungsplanung und Forschungsförderung (BLK), re history: <https://www.umweltschulen.de/agenda/bildung-fuer-nachhaltige-entwicklung-in-der-schule.html>; furthermore: [www.blk21.de](http://www.blk21.de)

13 Information available at: <https://www.bne-portal.de/de/bundesweit/un-dekade-bne-2005-2014>

## SUSTAINABILITY EDUCATION COMPETITION "READY, SET, FUTURE!"

Without the generations to come, sustainability means very little. Not only do we need to maintain a liveable world for children, adolescents and young adults – they also need to be taught how to act responsibly as the decision makers of the future. The German Council for Sustainable Development (RNE) therefore initiated the "Ready, set, future!" ("Zukunft, fertig, los!") ideas competition in mid-2017. It is aimed at traditional education institutions ranging from day care centres to vocational schools and higher education institutions, at further education institutions and at associations, foundations, youth groups and other initiatives. There were some 100

entries and the projects demonstrated what was being done at the grass-roots level to achieve the 17 global Sustainable Development Goals.

Results included, for instance, a nature app at the Museum of Natural History Berlin, the handbook "The school of repairs" ("Reparieren macht Schule") which raises awareness for the concept behind Germany's first repair workshop run by schoolchildren, or the "Catalogue of useless things" created by Braunschweig University of Art (HBK). A jury of experts selected 22 projects to showcase their work to foundations, companies and policymakers in a round of "Speed

dating for #SDGeducation", after which approximately half of the projects were sponsored.

The education competition actively addresses what the fourth global Sustainable Development Goal calls for, namely ensuring inclusive and quality education for all and promoting lifelong learning. The German Sustainable Development Strategy has a similar goal of offering all children and adolescents greater participation and better opportunities.

For further information, please see [www.sustainabilitycouncil.de](http://www.sustainabilitycouncil.de)

in this international initiative, which was designed to strengthen activities in all areas of education.<sup>14</sup> The wide-ranging projects gained visibility through an award programme which commended approximately 2,000 projects (from some 3,000 applications) for their achievements in the field of ESD. During the same period, the conferences of both the country's education ministers and its university rectors also signed recommendations and/or statements to strengthen ESD.<sup>15</sup> The end result, however, was merely the conclusion that numerous good projects and initiatives had been recorded. Although the decade had brought about considerable progress, there was no indication of ESD being

systematically integrated into all areas of formal education. Nor was this to be expected. Diffusion research<sup>16</sup> has taught us that a large number of good examples, award-winning projects, etc. cannot structurally embed innovations. There will always be those who adopt innovations – in the education system too. However, the question is how to reach those who primarily hold on to long-established standards, the requirements of syllabi and content frameworks, curricula, etc. and are reluctant to experiment, instead preferring to carry on in the same vein, as specified by the regulations. This calls for a change in the regulations themselves – in the expectation that this will prompt those in

14 Deutsche UNESCO-Kommission e. V. (ed.) (2008): "Nationaler Aktionsplan für Deutschland. UN-Dekade Bildung für nachhaltige Entwicklung 2005 bis 2014", Bonn.

15 <https://www.bne-portal.de/de/bundesweit/un-dekade-bne-2005-2014>

16 Rogers, E. M. (1983): *Diffusion of Innovations*, 3rd edition, New York.

question to change their behaviour. There is, however, no small risk of this expectation being disappointed.

As a consequence, the UNESCO Global Action Programme on Education for Sustainable Development (2015 to 2019), the follow-up programme to the Decade of ESD, is dedicated to taking ESD beyond the project level and integrating it into structures.<sup>17</sup> In Germany, a complex organisational structure consisting of a national platform, industry forums and partner networks has been established under the aegis of the Federal Ministry of Education and Research (BMBF) to systematically embed ESD in all areas of education.<sup>18</sup> Key players and stakeholders have been incorporated into this set-up – from federal ministries and the conference of education ministers to foundations, NGOs, businesses, the scientific community, experts with practical experience and youth representatives. A joint national action plan was adopted in 2017 which contains 130 targets and 349 recommendations to be implemented over the next few years. For instance, the action plan states that suitable means of strengthening ESD at schools are “developing concepts specific to each federal state (overall strategies for ESD, action plans, etc.); incorporating ESD into school

legislation and other legislative frameworks; integrating ESD into teacher training (basic/ advanced training and continuous professional development [CPD])”.<sup>19</sup> As regards targets for higher education institutions, the document states, for example: “Target and performance agreements are a key means of shaping policy at higher education institutions. The federal states and higher education institutions are called upon to take ESD/sustainability into account as a higher education policy objective in their target agreements for the next forthcoming period.”<sup>20</sup> The national action plan adopts an imperative tone and delivers a clear call to action. Although key players and those responsible for changes in the education system were involved in drawing up the action plan, the decision to require the integration of ESD into the education system falls within the remit of the relevant state parliaments, bodies and organisations.

### **Education for sustainable development that leaves no one behind**

So what is meant by ESD? It would be too simplistic to imagine that it were only about issues such as climate change, social justice, poverty, hunger, etc. Merely taking the 17 SDGs and integrating them into lesson plans for

17 UNESCO (2014): “Roadmap for Implementing the Global Action Programme on Education for Sustainable Development”, German translation, Bonn. Available at [https://www.bmbf.de/files/2015\\_Roadmap\\_deutsch.pdf](https://www.bmbf.de/files/2015_Roadmap_deutsch.pdf) (last accessed: August 2018)

18 BMBF: “Umsetzung des Weltaktionsprogramms „Bildung für eine nachhaltige Entwicklung“ in Deutschland. “Vom Projekt zur Struktur – wie wir Bildung für nachhaltige Entwicklung stärker und breiter aufstellen” (no place or year of publication). Available at: [https://www.bmbf.de/files/WAP-Umsetzung\\_BNE.pdf](https://www.bmbf.de/files/WAP-Umsetzung_BNE.pdf) (last accessed: August 2018)

19 Nationale Plattform Bildung für nachhaltige Entwicklung (2017): “Nationaler Aktionsplan Bildung für nachhaltige Entwicklung”, Berlin, p. 25.

20 Nationale Plattform Bildung für nachhaltige Entwicklung (2017): “Nationaler Aktionsplan Bildung für nachhaltige Entwicklung”, Berlin, p. 25.

## SUSTAINABILITY CULTURE FUND SUPPORTS FIVE SDG EDUCATION PROJECTS

Five of the ideas submitted as part of the "Ready, set, future!" ("Zukunft, fertig, los!") education competition are now receiving funding of up to 50,000 euros from the Sustainability Culture Fund.

- » One of the projects supported, "Take off to your future" ("Abflug in die Zukunft"), sets out to transform one of the world's largest buildings into a real-life sustainability teaching laboratory to inspire visitors of all ages, including young people. With this initiative, the foundation Gemeinschaftsstiftung Berlin Tempelhof hopes to pave the way for innovative sustainability concepts at the airport. To achieve this, it plans to run an ideas competition and workshops for youngsters in connection with the airport repurposing process.
- » Preschoolers and children of primary school age learn best through stories, which is why "White sheet of paper" ("Das weiße Blatt") uses visual storytelling with the help of Kamishibai, Japanese paper

theatre. The project's initiator - the Schleswig-Holstein Central Library - is developing sets of picture cards which encourage audience members to join in, tell the story, sing and paint their own pictures and help make sustainability accessible.

- » The University of Göttingen also has a message to share: how research is contributing to implementation of the SDGs. Its planned film concept is to be aimed at schoolchildren, which is why the university intends to involve them in its development. The series of films entitled "Sustainable development and the Sustainable Development Goals" ("Nachhaltige Entwicklung und Sustainable Development Goals") is designed to show schoolchildren, students and young graduates how interesting sustainability research is.
- » Meanwhile, the multimedia storytelling project "UmWelt360" brings together written media, audio and video: as ambassadors

for sustainability in their region, young people produce 360° photos, audio footage, information boards and videos about sustainability issues for an exhibition and develop visions of the future with the aid of a virtual reality tool. Submitted by the JuMP project run by the Bielefeld-based charity Haus Neuland e. V., this idea was also developed in conjunction with young people.

- » "Komfona", the fifth project sponsored by the Sustainability Culture Fund, is aimed at a slightly older group: 100 prospective vocational school teachers. The vocational and business teaching course unit at Leuphana University of Lüneburg creates research workshops where students can develop strategies and criteria for promoting sustainable development in the context of vocational schools. These are then presented in the form of 18 scenes using the spoken word, drama and dance.

existing school subjects would not meet the demands that are being made of the education system. Good ESD is best described briefly by differentiating between aims, content and methods - as is traditionally done in teaching - and looking at organisational

structures in the education sector. Numerous experts consider the aim of ESD to be the acquisition of "Gestaltungskompetenz" (shaping competence).<sup>21</sup> This comprises the knowledge and abilities to analyse unsustainable developments and initiate sustainable development processes.<sup>22</sup>

21 Brock, A. et al. (2017): "Was ist gute BNE?" - Ergebnisse einer Kurzerhebung", Berlin. Available to download from: [www.ewi-psy.fu-berlin.de/einrichtungen/weitere/institut-futur/aktuelles/dateien/Kurzerhebung\\_gute\\_BNE.pdf](http://www.ewi-psy.fu-berlin.de/einrichtungen/weitere/institut-futur/aktuelles/dateien/Kurzerhebung_gute_BNE.pdf) (last accessed: August 2018)

22 de Haan, G. (2008): "Gestaltungskompetenz als Kompetenzkonzept der Bildung für nachhaltige Entwicklung". In: Bormann, I., de Haan, G. (ed.): *Kompetenzen der Bildung für nachhaltige Entwicklung*, Verlag für Sozialwissenschaften, Wiesbaden, pp. 23-44 and de Haan, G. (2010): "The development of ESD-related competencies in supportive institutional frameworks". In: *International Review of Education*. Vol. 56, Nos. 2-3/June 2010, pp. 315-328.

That includes, for instance, the ability to see other people's viewpoints, carry out interdisciplinary and transdisciplinary analyses, cope with risks and uncertainties, motivate oneself and others, act in the interests of sustainable developments, and also reflect on one's own lifestyle, individual standards and aims. Even this brief summary shows that merely studying individual aspects of the sustainability discourse is not enough. Although the content of ESD is determined by the whole gamut of the sustainability discourse, the content should fulfil several criteria: "It should be geared towards the future and values (justice; living well), offer interdisciplinary insights and support sustainable developments (transformation)."<sup>23</sup> It also soon becomes clear that the SDGs cannot cover everything which is relevant for the sustainability discourse – such as the question of which form of sustainability is desired: strong, weak or critical sustainability? According to experts, the methods draw heavily on situated learning. The learners' experiences form the starting point<sup>24</sup> u ; the learning processes are participatory. There is a strong practical focus and the learners form communities of practice. This also means that children and young people participate much more strongly than previously and can contribute their ideas and visions of their own

future. As regards organisational forms, good ESD is linked with a clear paradigm shift at institutions. Sustainability is the institution's guiding principle: this relates to its energy supply, how it treats resources, procurement, the design of the grounds, mobility and food. In short, education institutions should lead by example.

### **Implementation status**

For assessing the current implementation of ESD in Germany, the ESD monitoring conducted as part of the Global Action Programme is a helpful source of information. Over the last few years, ESD has been integrated more strongly into structures in all areas of education. This is clear from more recent documents, such as school content frameworks and nursery education plans.<sup>25</sup> Nevertheless, an analysis of such documents reveals considerable differences in how developed ESD is, both in different areas of education (early years, school, higher education, vocational training, non-formal learning) and between the various federal states. As a rule, the formal education sector is less dynamic than the fields of non-formal and informal learning (e.g. private education providers). While, for instance, clear shifts can be seen at

23 Brock, A. et al. (2017): "Was ist gute BNE?" – Ergebnisse einer Kurzerhebung", Berlin. Available to download from: [www.ewi-psy.fu-berlin.de/einrichtungen/weitere/institut-futur/aktuelles/dateien/Kurzerhebung\\_gute\\_BNE.pdf](http://www.ewi-psy.fu-berlin.de/einrichtungen/weitere/institut-futur/aktuelles/dateien/Kurzerhebung_gute_BNE.pdf) (last accessed: August 2018)

24 Faulstich, P., Bracker, R. (2015): Lernen – Kontext und Biografie: Empirische Zugänge, Bielefeld.

25 Brock, A. et al. (2018): "Wegmarken zur Transformation. Nationales Monitoring von Bildung für nachhaltige Entwicklung in Deutschland", Leverkusen/Opladen and Singer-Brodowski, M. et al. (2019): "Pfade der Transformation. Nationales Monitoring von Bildung für nachhaltige Entwicklung in Deutschland", Leverkusen/Opladen (work in progress).



higher education institutions – especially in the training of early-years professionals – very little has happened over the past ten years in the key area of teacher training. Apart from this, higher education institutions are proving highly dynamic, however. Many have now put sustainability officers in place. By contrast, changes to degree courses are progressing at a slow pace – due in part to the separation of subject areas. Institutional structures often make it difficult to embed ESD systematically: while a high level of momentum is generally in evidence at present in early-years settings, where the understanding of education is shifting to accommodate ESD, progress in vocational training is being hampered by the need to reach a consensus between the consortium partners (employer and employee associations) and the differentiation which exists between sectors, professional groups and individual companies. The monitoring in connection with the Global Action Programme is comprehensively recording the implementation status of ESD in Germany for the first time. The results are encouraging in that some degree of dynamism is evident in most areas of education over the past five years. However, innovations are still proceeding at a very slow pace. ESD should already be comprehensively implemented in schools' content frameworks. Forms of learning should have changed considerably and the various

teacher training routes should already be geared towards ESD if we are to be confident that everyone will really know what action can be taken to promote sustainability by 2030 – as set out in the 2030 Agenda.

### **Measuring progress**

As yet, no indicator has been found to measure the progress of education for sustainable development. In my opinion, there are three options here. One possibility would be to use the delivery of advanced training and CPD to teachers as a benchmark for this topic<sup>26</sup> as changes can be effected in short time frames here (unlike, for example, content frameworks – which are modified approximately every ten years). Although this would not measure the skills – let alone actions – of children, young people and adults, teachers' capabilities are a prerequisite for ESD finding its place in schools. The second option would be to record the skills of children and young people in the field of sustainable development. However, a reliable instrument which complies with the standards set by PISA, for example, has yet to be found. Thirdly, a simple procedure could be discussed: the proportion of goods consumed (food, etc.) which carry the fair-trade symbol and an organic/eco-label. The argument for this approach would be that if people switch from conventional goods to fair-

<sup>26</sup> Waltner, E.-M., Glaubitz, D., Rieß, W. (no year of publication): "Entwicklung und Evaluation eines nationalen BNE-Indikators für Lehrerfortbildungen", Freiburg (unpublished) and Waltner, M., Rieß, W., Brock, A. (2018): Development of an ESD Indicator for Teacher Training and the National Monitoring for ESD Implementation in Germany. Available at: [www.researchgate.net/publication/326462660\\_Development\\_of\\_an\\_ESD\\_Indicator\\_for\\_Teacher\\_Training\\_and\\_the\\_National\\_Monitoring\\_for\\_ESD\\_Implementation\\_in\\_Germany](http://www.researchgate.net/publication/326462660_Development_of_an_ESD_Indicator_for_Teacher_Training_and_the_National_Monitoring_for_ESD_Implementation_in_Germany) (last accessed: September 2018)

trade, eco-certified products, this is associated with a learning process – however this was initiated and whatever the underlying forces motivating this action may be. In this case, the existing national indicator 12.1 a “Proportion of products with a state eco-label”<sup>27</sup> would need to be modified. Perhaps this is an unsatisfactory

solution for the field of education, however, whose role can only be to enable the acquisition of skills which permit sustainable action. What children, young people and adults do with these skills falls outside the responsibility of the education system.

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<sup>27</sup> Federal Statistical Office (2017): “Nachhaltige Entwicklung in Deutschland. Indikatorenbericht 2016”, p. 86 f.