

- **The online market for free learning materials in Germany.**
- **Are they replacing the textbook?**



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- A textbook is an analogous (print) or digital medium with the following features:
 - Place of use: Schools
 - User group aimed at: both teachers and pupils
 - Didactically ordered, structured and treated in reference to curricula and formal curricula with the aim to cover the whole „ subject matter“ (content, aims, competencies) (for example referring to one form)
 - Examined by the Ministry of Education and accredited for use in class
 - Teaching and learning material authorized by the state
 - Complex teaching/learning material in a media network, which is developed by a professional team (network of partners in different roles in a structured and protected framework)

- Free online learning material is a digital medium with the following features:
 - Place of usage: schools
 - Didactically ordered, structured treated
 - Group primarily aimed at: teachers
 - Secondarily aimed at : pupils
 - Can be used free of charge online (to be downloaded or sent by mail)
 - Very often specialized minority teaching material
 - Not the same as OER, because it is often used without Open-Content-Licence



Facts and Figures



| Subject | offered 2011 | offered 2012 | offered 2013 | Growth rate (in %) 2011 to 2012 | Growth rate (in %) 2012 to 2013 | Growth rate (in %) 2011 to 2013 |
|-----------------------------------|-----------------|-----------------|-----------------|---------------------------------------|---------------------------------------|---------------------------------------|
| All in all | 520.419 | 882.540 | 638.666 | 69,6 | -27,6 | 22,7 |
| Math | 70.037 | 107.266 | 99.438 | 53,2 | -7,3 | 42,0 |
| German | 113.045 | 132.980 | 129.034 | 17,6 | -3,0 | 14,1 |
| English | <i>n.e.</i> | 46.239 | 47.550 | | 2,8 | |
| French | <i>n.e.</i> | 20.923 | 23.440 | | 12,0 | |
| Chemistry | 6.468 | 12.576 | 8.363 | 94,4 | -33,5 | 29,3 |
| Biology | 14.875 | 21.716 | 22.497 | 46,0 | 3,6 | 51,2 |
| Physics | 8.465 | 13.421 | 12.678 | 58,6 | -5,5 | 49,8 |
| History | 20.803 | 24.989 | 20.410 | 20,1 | -18,3 | -1,9 |
| Economics/Law | 4.303 | 9.728 | 10.032 | 126,1 | 3,1 | 133,1 |
| Social Studies | 5.445 | 6.177 | 4.249 | 13,4 | -31,2 | -22,0 |
| Religious Education/ Ethics | 23.694 | 15.748 | 15.605 | -33,5 | -0,9 | -34,1 |

Who is offering free learning material online?

→ eight different material offering persons or groups can be classified

| Category of offering persons or groups | Number 2011 | Number 2012 | Number 2013 | Growth rate (in %) from 2011 to 2013 |
|--|-------------|-------------|-------------|--------------------------------------|
| All in all | 276 | 482 | 559 | 102,5 |
| Platforms | 4 | 6 | 12 | 200,0 |
| Business Enterprises | 18 | 22 | 50 | 177,8 |
| Societies or Trusts | 71 | 104 | 98 | 38,0 |
| Private persons | 83 | 127 | 145 | 74,7 |
| Commercial sector | 27 | 73 | 61 | 125,9 |
| Public sector | 30 | 88 | 100 | 233,3 |
| Publishing Houses | 36 | 55 | 87 | 141,7 |
| Clerical bodies | 7 | 7 | 6 | -14,3 |



- Users
- Didactic quality
- Critical point of view (ideologically biased)

■ Facts and figures

- Three types of material or textbook usage by teachers (on the basis of 720 examined questionnaires):
 - 1. on average high to medium use of textbooks, hardly any use of free online teaching and learning material
 - 2. on average medium to low use of textbooks, medium use of free online teaching and learning material
 - 3. Hardly any use of textbooks, hardly any use of free online teaching and learning material.



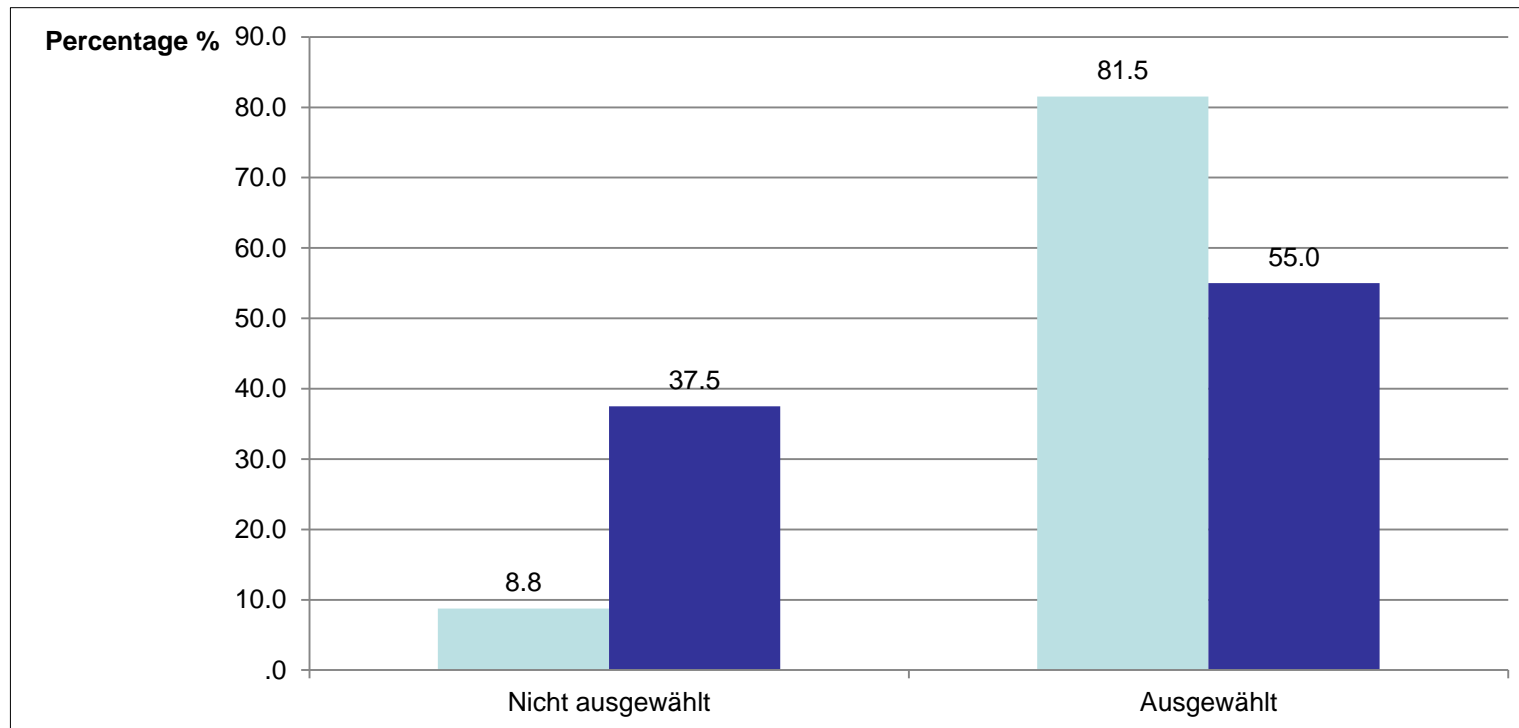
Facts and Figures



| Subject | „often“+ „every lesson“ (in %) textbook | „often “ + „every lesson“ (in %) free online learning material | User type |
|------------------------------|---|--|-----------|
| Biology | 40,5 | 15,5 | 1 |
| Chemistry | 18,5 | 6,5 | 3 |
| Deutsch | 47,2 | 20,0 | 1 |
| English | 77,7 | 16,8 | 1 |
| Geography | 53,3 | 19,5 | 1 |
| French | 75,1 | 8,1 | 1 |
| History | 60,4 | 14,6 | 1 |
| Local and General Studies | 7,9 | 41,1 | 2 |
| Computing | 8,5 | 29,6 | 2 |
| Latin | 36,9 | 0,0 | 1 |
| Math | 80,6 | 20,1 | 1 |
| Physics | 30,0 | 26,8 | 2 |
| Religious Education Catholic | 28,8 | 22,0 | 3 |
| Social Studies | 38,8 | 47,8 | 2 |

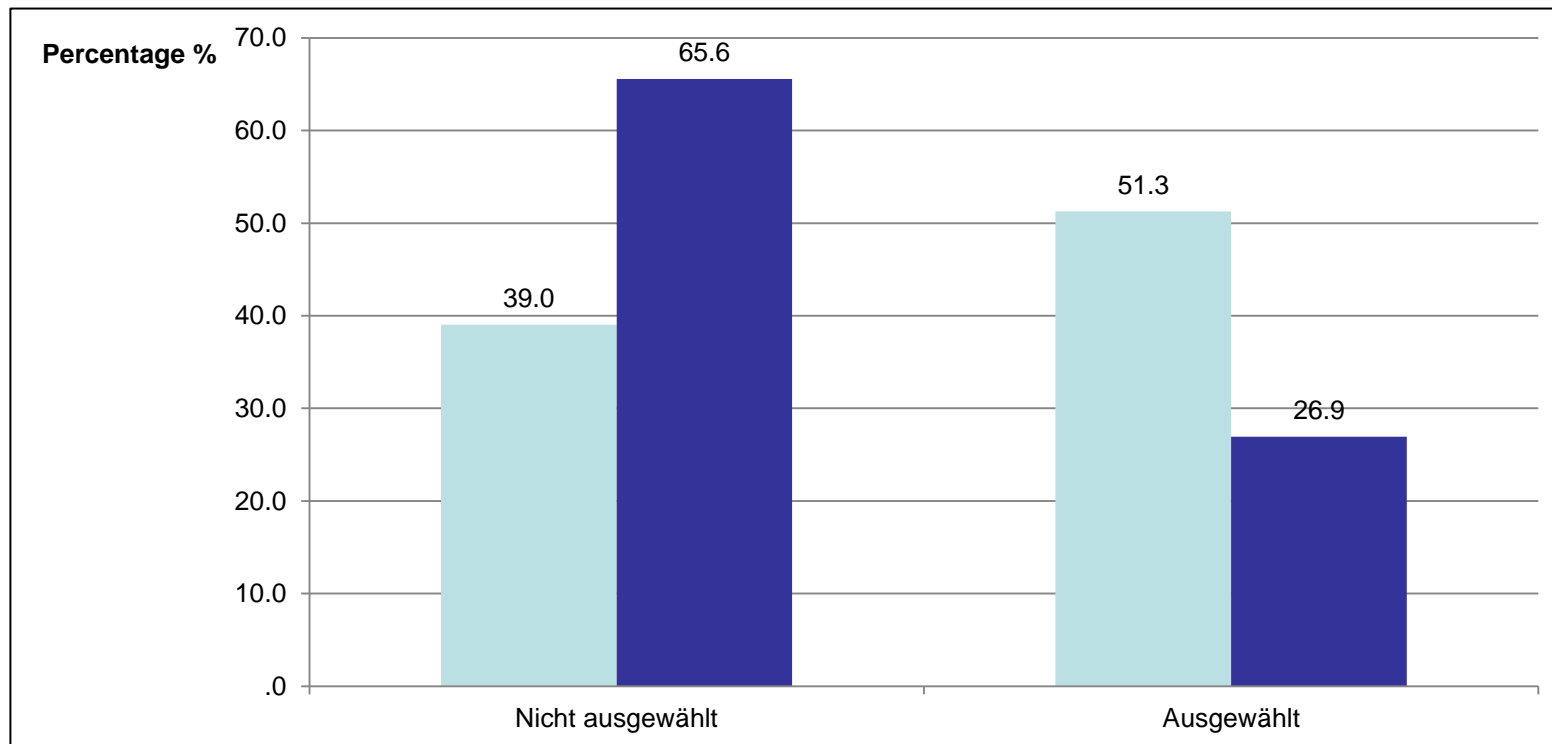


Item: Work with exercises/assignments from the textbook | - free online learning material)



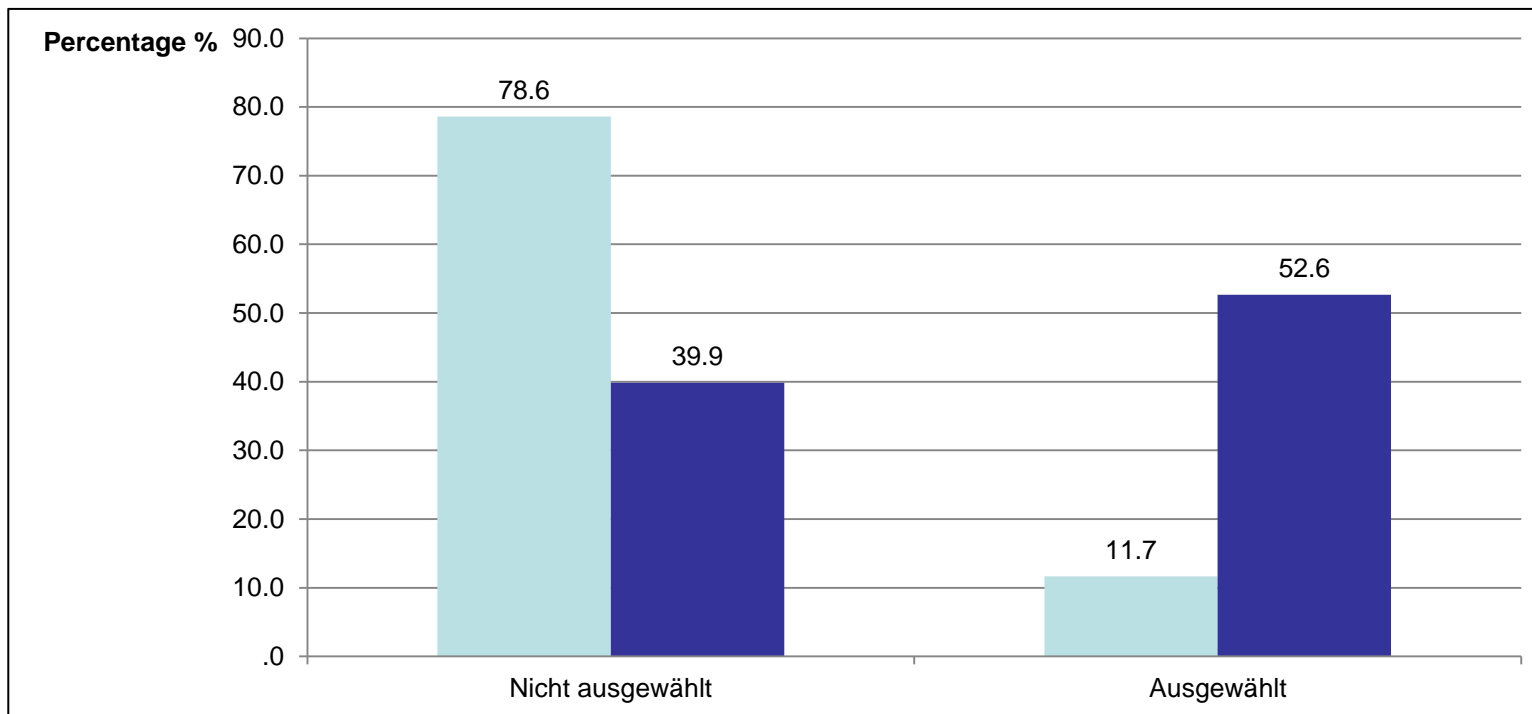


Item: Introduction of new subject matter(textbook) | free online learning material





Item: References to current issues (textbook) | free online learning material





- autonomously self-directed activity
- Differentiated instruction/Differentiation
- Competence orientation
- Formal assessment
- Up-to-dateness and references to our living environment

- overall tendency: a positive view towards free online learning material especially with focus on the enhanced possibilities for teachers and colleagues
- critically seen are the strong heterogeneous quality of the material and also its structural problems (for example its inclusion in the overarching subject-related educational concept; the violation of authors' rights and the problem of an exertion of influence by third parties on teachers as well as pupils.

- tendency to delegate too much responsibility onto teachers and to relativize their own responsibility of governance and/or their possibilities of control (preferences for indirect control by, for example, strengthening their teachers' media competence and by offering them excellence projects.)
- significantly heterogeneous response spectrum as regards the question asked „How is your view of the future development of all learning materials (including textbooks and free online learning materials and all other material used in teaching)?“

- progressive tendency towards digitalization (either descriptive or positively valued: high degree of multimedia, current issues, interactivity)
- further technological progress with effects on the use and presentation of teaching material
- problematized: technological development runs unevenly, is difficult to direct or evaluate
- further development of learning material as a mixture of different sources (print- digital, textbook- online teaching and learning material.)
- tendency to a didactic interactive functioning of teaching materials



- teachers become producers
- development towards abandoning the state ministry authorization/accreditation for textbooks
- legal school issues (for example advertisements in schools) have to be dealt with
- exclusively digitalized teaching material ought to be problematized pedagogically
- importance of current information for teaching is growing fast



Didactic Quality:



- very diverse, heterogeneous
- partly biased positioning/points of views
- partly hidden self-marketing by the offering institution

- Are free online teaching and learning materials from the Web replacing the textbook?



- No, if textbooks present themselves in a media network and reflect the current didactic - methodical state of discussion and if they openly present their didactic-methodical concepts. To express it differently: The above-mentioned limitations of the textbook can be overcome or have already been overcome. Present textbooks in the media network are made by professionals and are professional products.
- However, free online learning materials have risks/limitations in themselves, which can be overcome, if ever, only in a very difficult manner (they deal with selected points only, they are subjective and imbued by special interests, there are unresolved questions of authors' rights)



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