

## Experience with open source for e-learning

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- **Electronic Platforms**
- **CampusSource**
- **CampusContent**
- **Strategic Considerations**



Educational institutions considering the use of new media have to take three strategic areas into account:

- Suitable Tools
- Suitable Content
- Tutoring and Communication

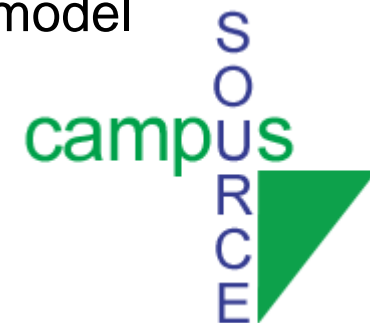


The basic features of a platform:

- Administration of students
- Creation and administration of content
- Support for authors and teachers
- Organization of the communication and tutoring



- >250 platforms available with 350 – 400 criteria (properties)
  - To identify individual criteria and evaluation is a time and effort consuming process
- Proprietary (self) development
  - Exactly implements business case, great flexibility, expensive, developed features already available
- Commercial solution
  - Monolithic (closed) systems, large range of features, authoring tools
- Application Service Provider (ASP)
  - Very attractive in the TCO, dependent on the ASP, limited flexibility, restricted in the choice of business model
- Open Source solution



- + Low-cost solution with regard to acquisition and operation
- + Flexible in usage of the software
  - + can be modified, improved or adapted for different applications
- + Provider independent
- + Developers try to use open standards and be compatible with other solutions
- + Usually a community of users and developers is available
- Partially „immature“ implementation
- Often lack of commercial support



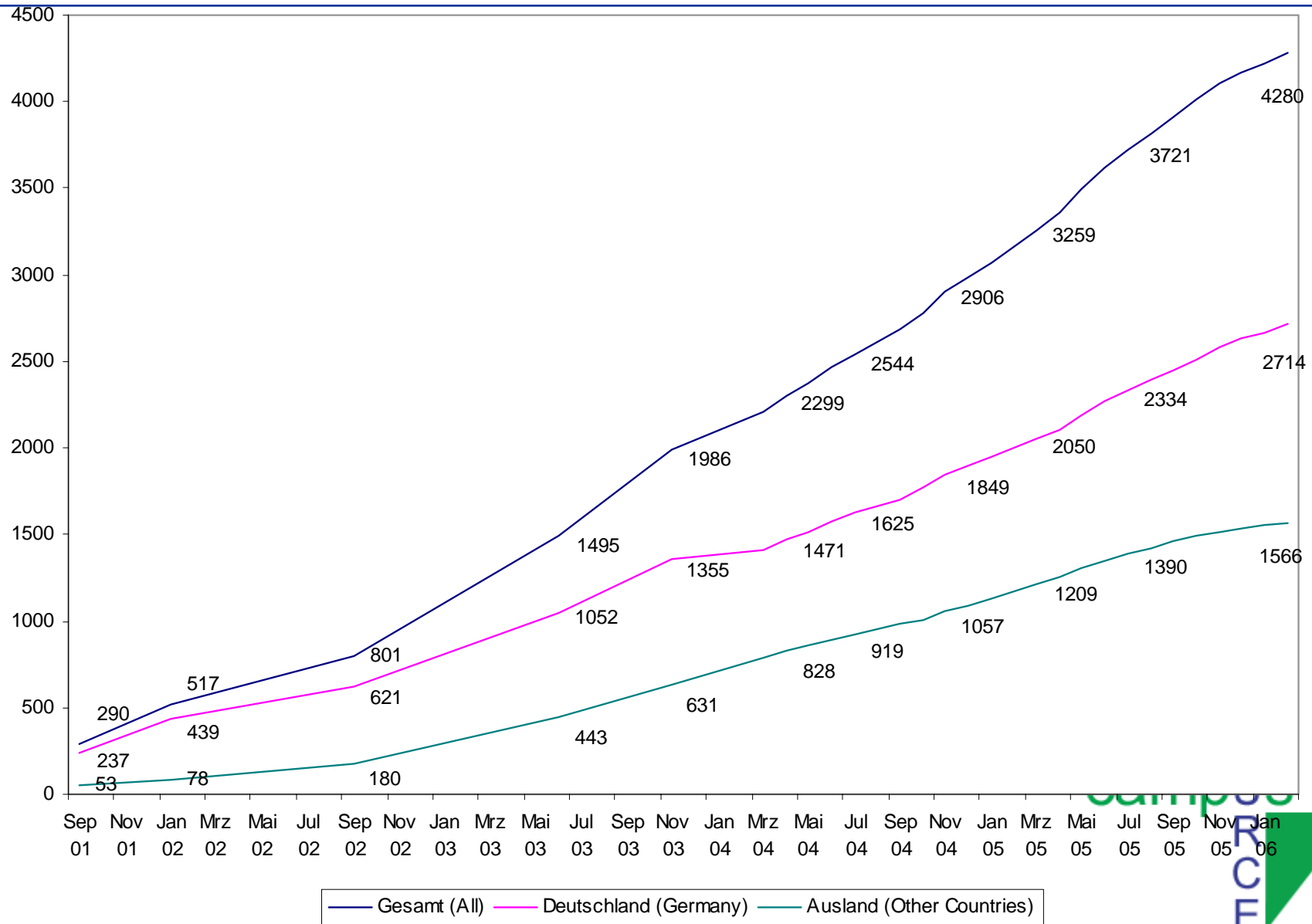
- Financially supported by the Ministry of Science and Research of the Federal State of North Rhine-Westphalia (Germany), launched 2001
- Software pool for e-Learning tools
- GNU General Public License (GPL)
  - Commercial use is allowed
- Currently 10 complete Platforms and 8 Modules
- Community and commercial partners for support
- At present more than 4000 registered users
  - Consolidated that each institution is counted only once
- Largest repository specialized on learning management systems and tools under the GPL worldwide



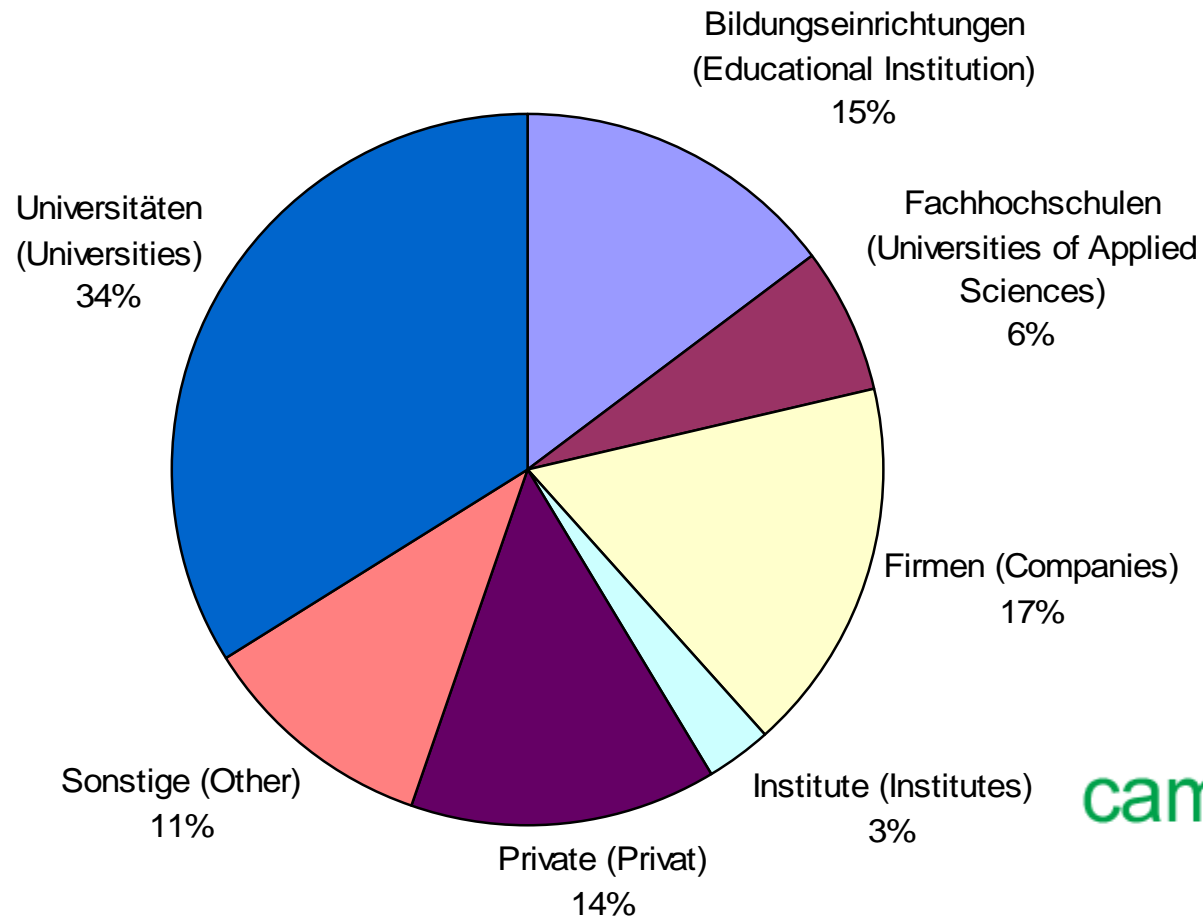
- Tools must be used on a long term basis
- Reviewed by two independent experts
- Basic requirements
  - Documentation
  - Licence
  - Free of commercial software







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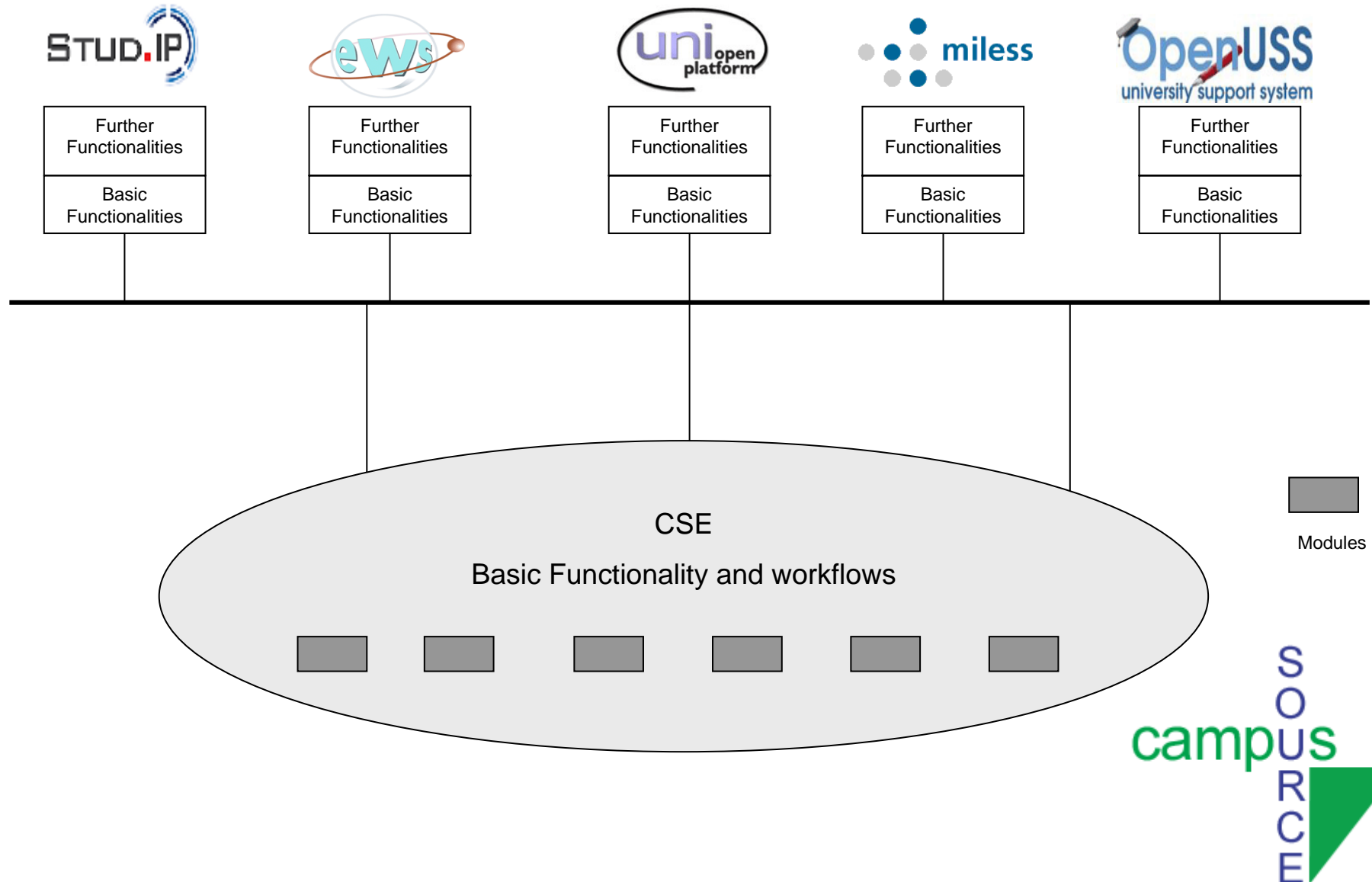


- Several systems
- Large number of features implemented
- Systems mostly not compatible
- Features not exchangeable
- Several small communities (around particular systems)
- No convergence of systems yet
- No single system completely satisfies all requirements



- Modular architecture with extensive compatibility
- Convergence of systems and tools using Integration technologies
- Formal modelling of work flows and learning scenarios
- Separation of layout and content (e.g. XML)





- Extension of CampusSource to CampusContent!



- The development of high quality multimedia content is
  - complex and expensive
  - special authoring tools are required
  - special know-how is required
- There is a vast quantity of multimedia content freely available
- But, acceptance is low mainly because it is not reusable or cannot be found.



- Launched at the FernUniversität 2005
- Funded by the German Research Organization (DFG)
- Main Idea: Overcome low acceptance by providing very fine granular learning object modules
  - well documented by metadata
  - easy to find and to reuse
- Goal: establish and run a service center for the
  - Production, collection, quality control,
  - dissemination and reuse of multimedia learning objects
- Establish content oriented communities for
  - Teaching, learning and research





- Use available and tested open source tools
- Small and medium sized enterprises should offer services
- Find strategic partners willing to share their content
- Content has to be modular and reusable



- Due to the limited budget of educational institutions, they should find a solution which can be financed
  - Open Source and Open Content as possible solutions
- Modularity and reuse will be some of the key issues in the future
- Tailor-made e-Learning environments based on software modules



- [www.campussource.de](http://www.campussource.de)
- [www.campuscontent.de](http://www.campuscontent.de)
- [elead.campussource.de](http://elead.campussource.de)

Thank You!

