

Computer-Based Trainings in Action

A product orientated evaluation of the CBT “Hyperbook Privatrecht” and the examination of factors influencing the usage of CBTs

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Key words: *Tele-learning, CBT, Multimedia*

Abstract:

Technology acceptance is a heavily discussed field – nowadays, especially in the context of multimedia products. This paper is about the evaluation of the Hyperbook Privatrecht – a CBT that contains the basics of Austrian Civil Law. After the first use at the University of Applied Sciences Vienna, its acceptance was evaluated. Both product-based factors and general acceptance factors, were analysed considering various parameters of acceptance research.

The results show that the Hyperbook Privatrecht is generally accepted by the students.

The CBT had a supporting function within their personal learning processes. Additionally, some of the general acceptance factors had an impact in this case. The results of this evaluation encourage the further integration of CBTs within teaching.

1 Introduction

Due to the rising demand of education and the increasingly important cost factor of education, both, the traditional educational system and the organization of trainings in companies, have to be enhanced. One possibility to keep up with this development is the use of Computer-Based Trainings (CBTs) (see [15]).

There are three ways to use CBTs (see [15]):

- CBTs can be used instead of traditional study material like scripts and books.
- CBTs can replace parts of presence trainings.
- CBTs can completely replace presence courses.

Referring to the evaluation model of Will, Wintler, & Krapp (see [15]), this paper concentrates on the product evaluation of the Hyperbook Privatrecht. Since a product-orientated evaluation considers the product-specificity as well as the characteristics of the product category in general (in our case CBTs), the term CBT also refers to the Hyperbook Privatrecht – except stated otherwise.

The general acceptance of the CBT, the user interface, the functions of the Hyperbook itself, and the subjective utility awareness within the individuals' personal learning processes are evaluated. Additionally, based on models for general technology acceptance, this paper tries to identify general factors influencing the acceptance of CBTs.

Section 2 deals with the motivation for the Hyperbook Privatrecht, the development process, and its content. Based on technology acceptance models, section 3 presents factors influencing the acceptance of CBTs. Section 4 gives a description of the evaluation's method and process and presents the results. The paper concludes with a résumé in section 5.

2 The Hyperbook Privatrecht

The Hyperbook Privatrecht is a CBT that lays the foundation of Austrian Civil Law in a modular way. It was produced by the Mühlehner & Tavolato GmbH on behalf of the University of Applied Sciences Vienna.

2.1 Starting Point

Due to the specific situation of the Universities of Applied Sciences in Austria – especially in evening classes (with a high percentage of working students) –, it is necessary to reduce presence time for students. Nevertheless, the quality of the courses has to remain the same. Since current presence time is calculated very tightly by now, a further reduction of presence time must be compensated by self-study material on high quality level. Therefore, the use of CBTs could be an option (see [11]).

Furthermore, the use of CBTs derives from the aim to reduce presence time of lecturers due to their costs. The use of CBTs allows a shift of resources from teaching to other fields like research. This is a pivotal point for the further development of the Universities for Applied Sciences in Austria (see [4]).

Additionally, the motivation for the development of CBTs lies in the very specific situation of content presentation with New Media. Currently, there is a lack of concepts for content presentation using New Media (CBTs, WBTs etc.). The majority of existing solutions does not go further than just transferring traditional media's presentation concepts to New Media. However, deployment of New Media requires adequate concepts different from traditional concepts. Consequently, CBTs based on traditional presentation concepts are not adequate and lead to low acceptance rates. If content products want to gain sustainable acceptance, new standards for the presentation of content have to be established.

2.2 Process of development

The Hyperbook Privatrecht was produced using the development tools of the TeleWIFI System. The TeleWIFI System is the e-learning platform of WIFI Austria. Basically, it consists of a course management and a content development system.

In 2001, an interdisciplinary team was formed in order to develop and produce the Hyperbook *Privatrecht*. Lead by Dr. Paul Tavolato, the team consisted of experts in Austrian Civil Law, graphic designers and implementation experts. Moreover, a professional speaker was engaged.

The Hyperbook *Privatrecht*'s development started with the generation of its content, which was documented in a Microsoft Excel sheet. This sheet had been the production team's central working tool used for communication and coordination. Table 1 gives an example of this sheet.

Content	Heading	Spoken text	Wave-file	Written text	Links	Graphics
Beispiel	Kaufvertrag	Kaufverträge schließt wohl jeder von uns täglich, meist sogar mehrfach ab. Das beginnt schon mit dem Erwerb der Morgenzeitung und findet in unzähligen tagtäglich abgeschlossenen Umsatzgeschäften seine Fortsetzung. Hier wollen wir uns mit den juristischen Grundlagen eines Kaufvertrags befassen.	ton\m501w1.wav			Irgendeine Darstellung von Kauf
Definition				Im Kaufvertrag verpflichtet sich der Verkäufer zur Übergabe und Übereignung einer Sache <Link: Modul 601> und der Verkäufer zur Zahlung eines - aus Geld bestehenden - Kaufpreises.	§ 1053 ABGB § 1061f ABGB	

*Table 1. Sample of the sheet for the production of the Hyperbook *Privatrecht**

The first two columns define the general content of the Hyperbook *Privatrecht*. The third column shows the spoken text if there is any. The fourth column is reserved for the name of the sound file that contains the spoken text. The fifth column shows the written text if there is any. The sixth column is reserved for references to original material like legal texts.

The above-mentioned sample leads to a front-end presentation that is illustrated in Figure 1. This front-end presentation was realized by using the TeleWIFI Book Author and the TeleWIFI Exercise Author for the integrated self-control exercises.

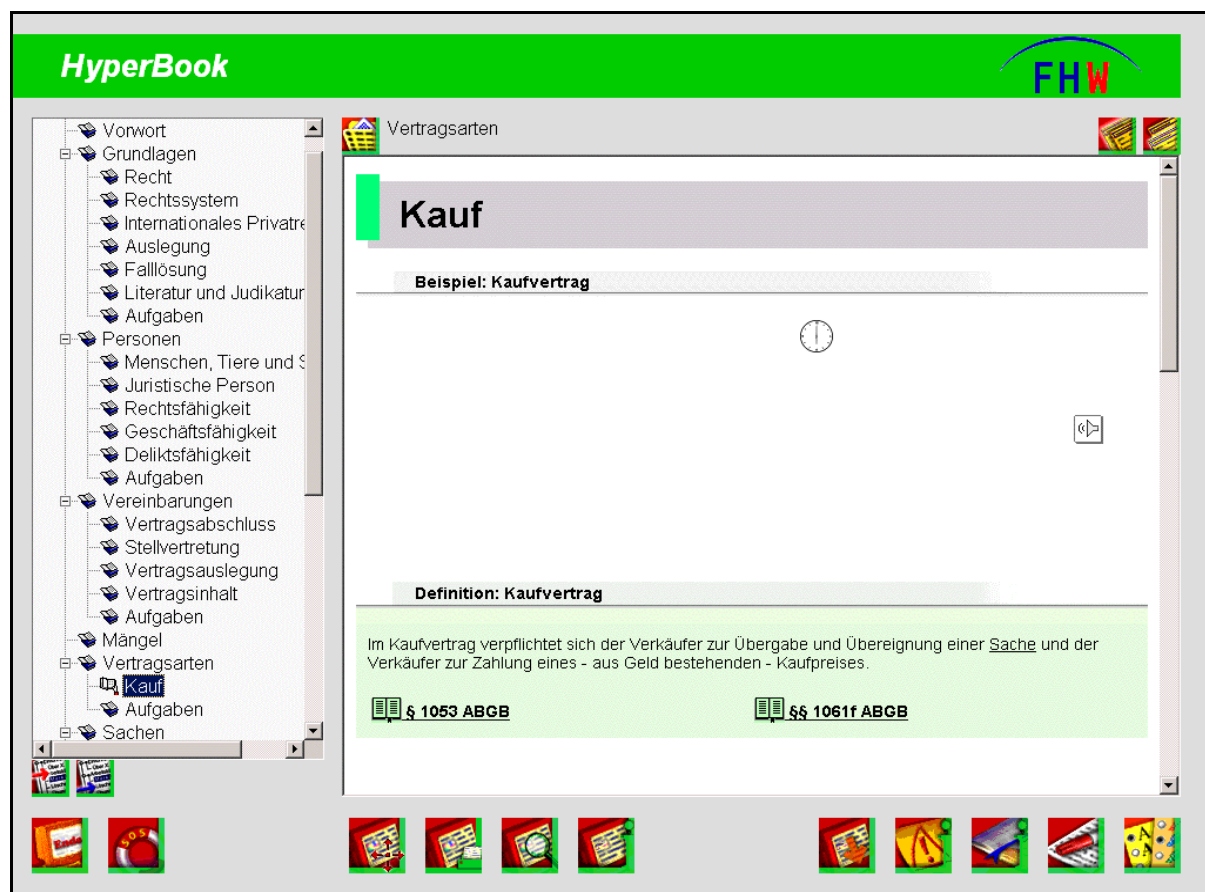


Figure 1. Front-end sample of the Hyperbook Privatrecht

2.3 The Hyperbook Privatrecht's content

The Hyperbook Privatrecht contains the following parts of the basics of the Austrian Civil Law:

1. Grundlagen	5. Vertragsarten	9. Wertpapiere
2. Personen	6. Sachen	10. Gesellschaften
3. Vereinbarungen	7. Sicherungen	11. Wettbewerb
4. Mängel	8. Ersatz	

The structure of each module is identical. The modules start with a typical situation of every day life that leads to the relevant legal topic. After the presentation of the subject, each module ends with self-control exercises, which enable the students to measure their personal learning progresses.

2.4 The Hyperbook Privatrecht's functions

The Hyperbook Privatrecht is more than just an HTML script. A CBT has much additional functionality, which facilitates the user's information absorption and processing. The Hyperbook Privatrecht supports the following functions:

- **Annotations:** The user is given the possibility to make annotations and memos, which are saved with the document. These annotations can be viewed within the text of the CBT, in an own window or as tip by moving the mouse over an icon.
- **Bookmarks:** Any part of the CBT can be bookmarked. The user is free to edit, sort, and invoke his bookmarks.
- **Search function:** The user can optionally carry out a full-text search within the whole document or within a single chapter. Moreover, it is possible to incorporate the annotations in the search.
- **Marker:** The user has the possibility to highlight text passages with different colours.
- **Print:** The Hyperbook has a selective print function.
- **Self-control exercises:** There are three different types of self-control exercises: multiple choice exercises, completion tests, and allocation exercises.

3 Factors influencing the acceptance of the CBT

A product orientated evaluation gives information about how a specific product is accepted by its users. In our case, it is all about the Hyperbook Privatrecht – a CBT. However, is it only the product itself that determines the acceptance?

Technology acceptance was the subject of numerous field studies and experiments based on various different models (see for example [2], [3], [8], [9], and [13]). A meta-analysis of acceptance research concerning IT-systems (see [13]) reveals two general factors that decisively influence a system's acceptance:

- *perceived ease of use* and
- *perceived usefulness*.

At this point, we want to emphasise that we neither want to evaluate to what extent attitude does influence behaviour nor how behaviour is able to change attitude. Our evaluation's subjects are the description of the use after the pilot phase as well as identifying factors influencing a CBT's acceptance.

Taking into consideration what has been said so far, we believe that the determinants of a CBT's acceptance can be divided into two kinds of factors: so called *general factors* and *product specific factors*.

General factors exist independently of a specific product; therefore, these factors influence the acceptance of *any* CBT product. In a nutshell, general factors subsume the user's general attitude towards CBTs whereas the product-based factors refer to the product's specific offerings. As can be seen in Figure 2, we consider the following general factors:

- *prior experience* with the technology,
- *social influence*, and
- *socio-demographic factors*.

The product specific factors are the CBT's functions and its user interface.

Both kinds of factors, general as well as product-based factors, directly influence perceived ease of use and perceived usefulness. As already mentioned above, these two factors are deciding criteria for acceptance.

In addition, we want to introduce a factor that seems important according to our observations. We call it *perceived joy*. Why do we think that something like joy is important within multimedia study material? Nowadays, there is a lot of traditional study material offering good quality and structure. However, sometimes the presentation is a bit dry. We believe that this is the point which allows multimedia study material, unlike traditional study material, to offer additional value. Multimedia study material will hardly ever replace advanced literature, but it can make the approach to a specific topic easier and entertaining.

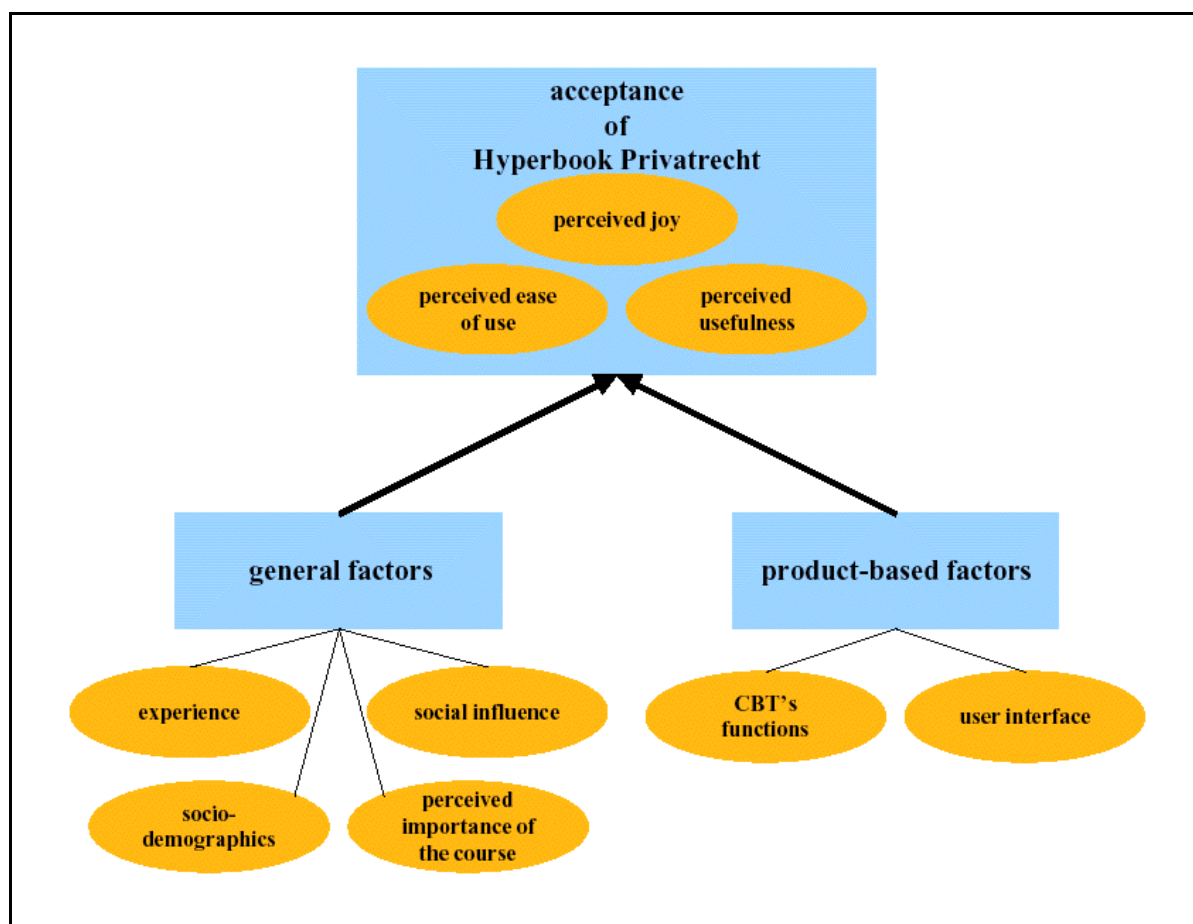


Figure 2. Factors determining a CBT's acceptance

In the remainder of this section, we provide a description of the relevant factors in the model as well as explicit hypotheses implied.

3.1 General factors

Experience

[6] state: "Users may or may not like using the computer. Their attitudes may depend on their expectations before using the system [...] and/or their own experience with the system. This reaction may or may not get more favourable over time."

We suggest, the more experience with a technology an individual could acquire, the better he will be able to make use of it. [9] – referring to Triandis – postulate that habits are a function of an individual's past experience and his ability to accomplish specific tasks.

For instance, while information richness theory would expect face-to-face conversation as the richest communication system, [5] reported that experienced computer users rated text-based

media as rich or richer than telephone and face-to-face conversations. Likewise, [9] report on Rice, Grant, Schmitz, & Torobin's findings that individuals' experiences with text-based media influence adoption and reinforce models of rational or task-based choice of communication media.

Similarly, [14] reports in context of communication technologies that organizations which are more experienced in e-mail could significantly improve their internal and external communication if compared with less experienced ones, even though e-mail use sometimes leads to information overload and social impoverishment.

We therefore expect prior experience to influence students' use of the CBT which materializes in our first hypothesis.

H 1. There is a difference in the acceptance of the CBT by those who have already worked with a CBT and those who have not.

Experience with CBTs might not be the only factor of familiarity with the technology. CBTs can also be seen as the continuation of other technologies – computers, the Internet, CBTs. In the past decade, the use of computers has become so casual. The Internet, at the beginning of the last decade something new – a challenge –, meanwhile has been integrated in nearly everybody's life. For this reason we suggest that the use of the Internet indicates the acceptance of computers as well as the Internet's acceptance, which build the basis for CBTs' acceptance. These considerations lead to our second hypothesis:

H 2. There is a positive relationship between the intensity of Internet use and the acceptance of the CBT.

Social influence

[9] argue, "Perceived social pressure to perform (or not to perform) a particular behaviour is likely to influence intentions". In our case, the instructor was the course's head giving his lectures (one-way communication) and introducing the CBT to his students; thus, he was in a position to broadly communicate his opinion about the CBT. [10] reports experiences with virtual universities, which showed that there is the necessity of motivating online-offers by tutors/ instructors. It clearly makes a difference whether the instructor acts as promoter – i.e. he supports the CBT and encourages his students to use it, – or neglects it and just mentions incidentally that there also exists a CBT for the course, which might be relevant for the final exam but probably not. In a nutshell, regardless whether the instructor is in favour of the CBT or not, he is likely to influence his students. [16] suggests that it is critical that individuals in positions of leadership set a positive climate for innovation. Taking into consideration what has been said so far, we expect that:

H 3. The instructor has an influence on the acceptance of the CBT by the students.

Socio-demographics

Most authors in acceptance research (see [7] and authors cited there) refer to personal characteristics as influencing factors on acceptance. However, mostly they do not mention which characteristics indeed influence acceptance.

Attitude is a learned behaviour; thus, it is steadily changing because it is a never-ending learning process. Due to learned behaviour in gender interaction, we expect a gender-specific difference in the CBT's acceptance.

H 4. There is a gender-specific difference in the acceptance of the CBT.

Though older people could acquire more experience with technologies in their lifetime, we do not expect them to be as flexible to adapt to and accept new technologies as young people do. Even if older people are said to be open-minded, our considerations lead to the hypothesis that:

H 5. There is a negative relationship between age and the use of the CBT.

Perceived importance of the subject

According to [2], the acceptance of an innovation is influenced by the importance of the task which it supports. Therefore, we suppose that:

H 6. There is a positive relationship between the perceived importance of the course and the use of the CBT.

3.2 Product-based factors

CBT's functions

The functions offered play a crucial role for the acceptance of an innovation (see [2]). Only if there are not any necessary function missing, the adequate use of the CBT is possible.

H 7. The more the CBT's functions are used, the higher the acceptance of the Hyperbook.

User interface

The user interface is crucial to the acceptance of the CBT. The interface is the presentation of the whole product. The best technical features are useless if their presentations at the front-end are not user adequate.

H 8. The acceptance of the CBT is determined by the user interface.

4 Evaluation of the Hyperbook Privatrecht

4.1 Sample

Up-front, before the survey, a pre-test had been conducted at the University of Applied Sciences Wiener Neustadt. This pre-test resulted in a slight change of the standardised questionnaire. In the annex, you can find a sample of the questionnaire used for the survey.

Three classes, with a different lecturer each, were selected from the University of Applied Sciences Vienna. The authors of this paper personally distributed standardised questionnaires to the students. We received a return of 86 questionnaires. Due to missing data, 9 questionnaires could not be processed (see Table 2).

Examined Persons	86
Useful Cases	77
Method of Data Collection	Standardised questionnaire
Method of Data Analysis	Descriptive statistics to describe use; Analytical statistics to test hypotheses

Table 2. Survey of the evaluation's method

58.4 percent of the students of our sample are male, 41.6 percent are female. On average, students are slightly over 26 (median=23) years old. This relatively high value is due to the type of classes examined. Two out of the three classes are evening classes, which are generally attended by working students; usually, working students are older than school graduates.

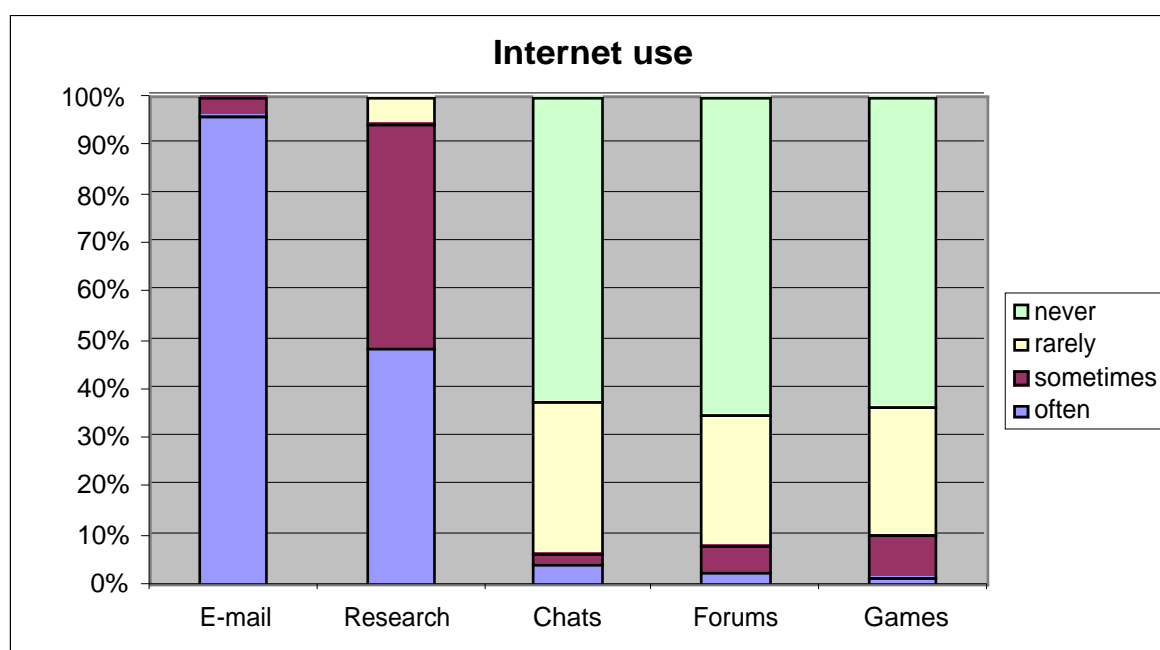


Figure 3. Students' Internet use

Figure 3 shows the structure of the students' Internet use. The students were asked to describe their use of the Internet for e-mail, research, chatting, forums, and playing games.

The use of the Internet for e-mail and research seems to be integrated into the respondents' every-day-lives. 96 percent of the students use e-mail often, and 4 percent sometimes. 95 percent of the students make at least sometimes use of the Internet for research purposes. Only 5 percent rarely or never do research with the Internet.

Applications like chats, forums, and games are rarely or never used. Only 7 percent of the respondents use the Internet at least sometimes for chats, whereas 93 percent rarely or never chat. Figures for forums and games are almost identical. Only 3 percent of the interviewees use forums often, and five percent use them sometimes. 27 percent of the respondents rarely make use of forums, whereas even 65 percent have never participated in one of them. Finally, only one percent of the students often play games using the Internet, 9 percent play sometimes, 26 percent rarely, and 64 percent never use the Internet for playing games.

As can be seen from Figure 4, 46 percent of all respondents have prior experience with multimedia learning systems, while 54 percent have not.

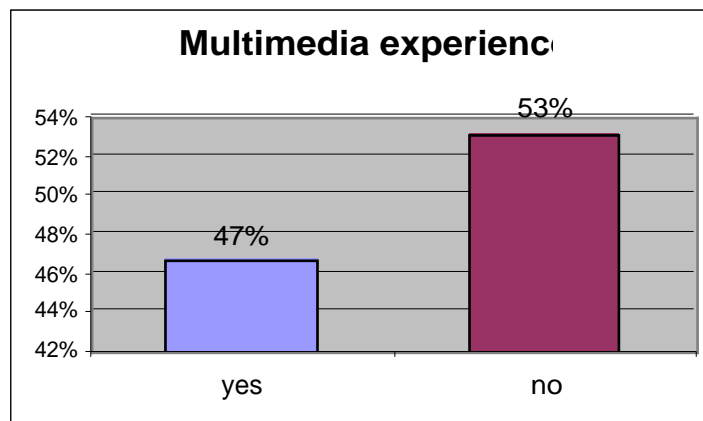


Figure 4. Students' multimedia experience

4.2 Results

The results of this survey are presented in two parts. The first part describes the use of the CBT, the second part deals with testing the hypotheses stated in section 3.

4.2.1 Description of the CBT's use

For most respondents, the Hyperbook Privatrecht had a supporting function within their personal learning processes (70%) (see Figure 5). We appreciate this outcome, since this had exactly been the aim of its development. Only 83 percent of the respondents had the technical possibility to use the CBT. For 17 percent the use was technically not possible because the Hyperbook Privatrecht does only run under computers equipped for multimedia features operating under Windows.

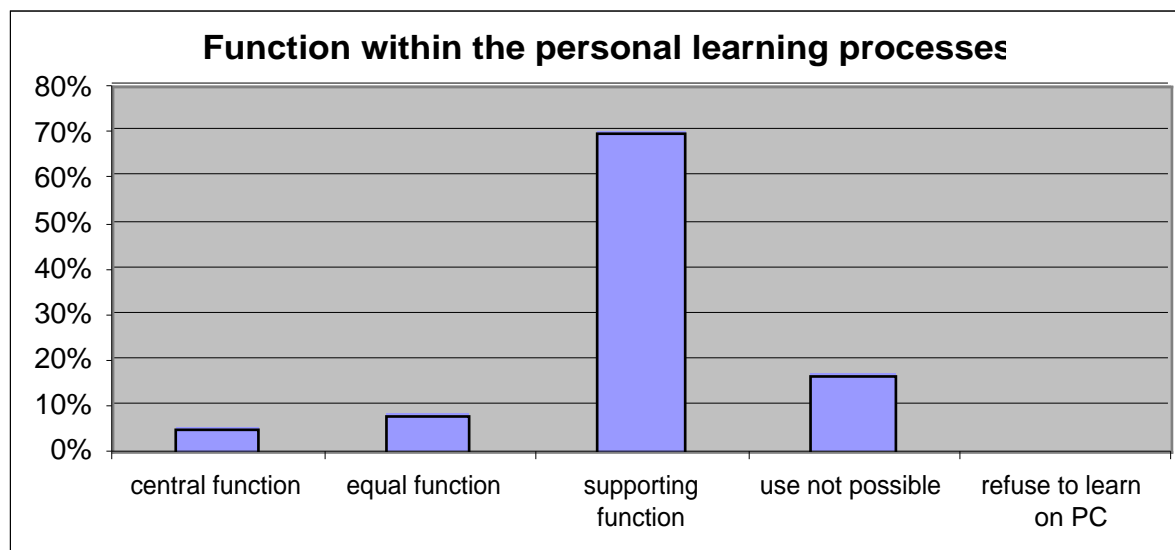


Figure 5. Function within the personal learning processes

Three of the questionnaire's questions had the function of measuring the acceptance of the CBT. As stated above, acceptance is measured by three factors: perceived ease of use, perceived usefulness, and perceived joy.

The overall acceptance of the CBT has an average of 2.7 on a scale from 1 to 5, where 1 is best. Table 3 gives a survey of the acceptance's determinants.

Perceived ease of use	2.96
Perceived usefulness	2.68
Perceived joy	2.45
Overall acceptance	2.70

Table 3. Acceptance of the CBT (averages)

The Hyperbook Privatrecht's functions are described above. However, how intensely have the students used the functions? As can be seen from Figure 6, the most-used functions are the search function, the self-control exercises and the links to legal texts.

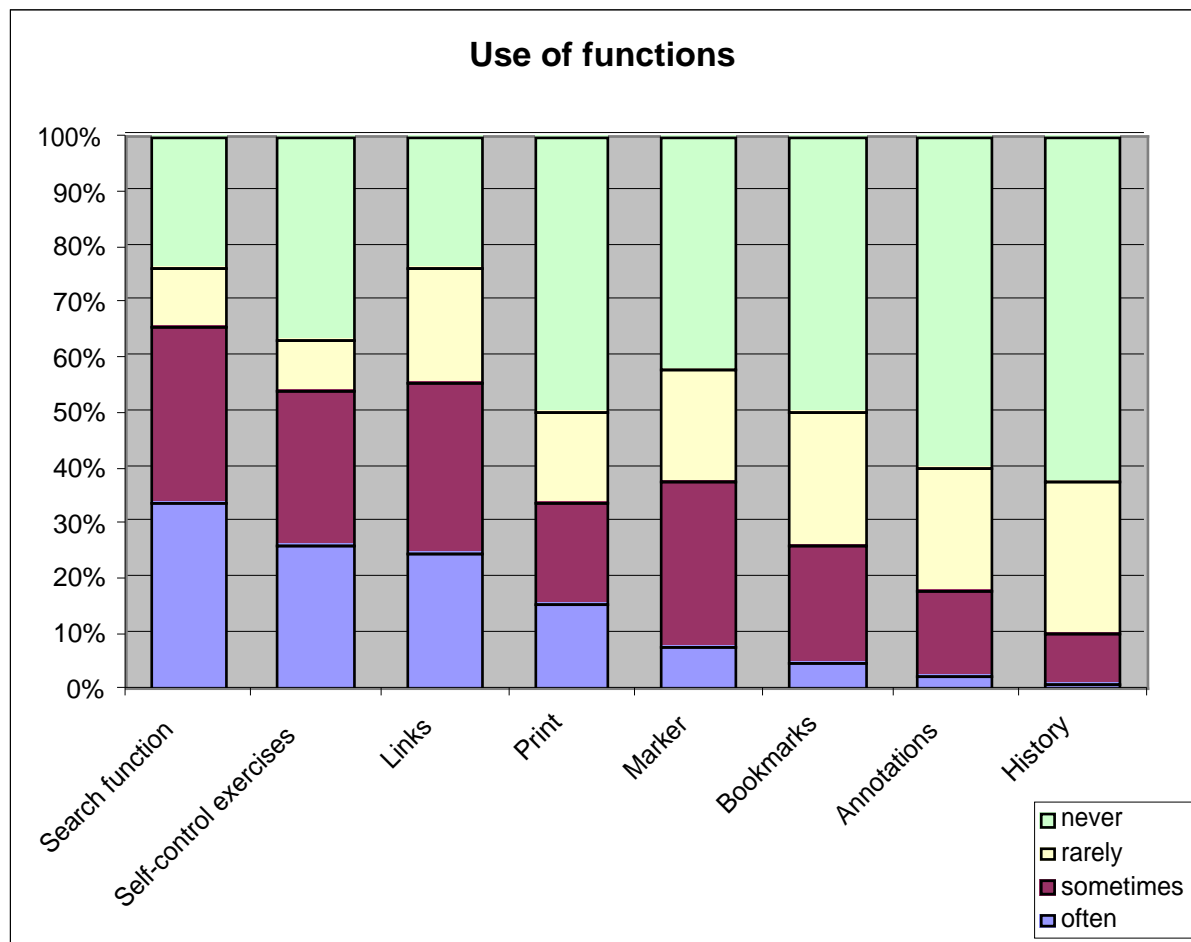


Figure 6. Use of the CBT's functions

The students were asked for their opinion concerning the further use of multimedia material in courses. Figure 7 shows that more than 80 percent of the respondents appreciate a further use of multimedia material.

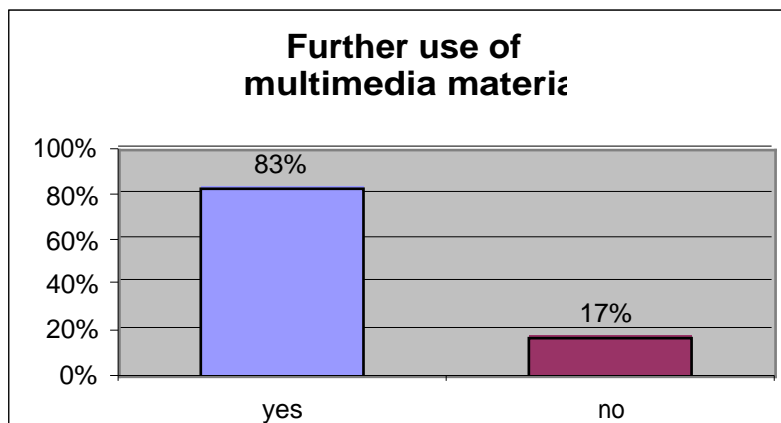


Figure 7. Further use of multimedia material

In an open question, students were asked for subjects where they would welcome the use of CBTs. More than 80 answers were given (multiple answers possible), which are presented in Figure 8.

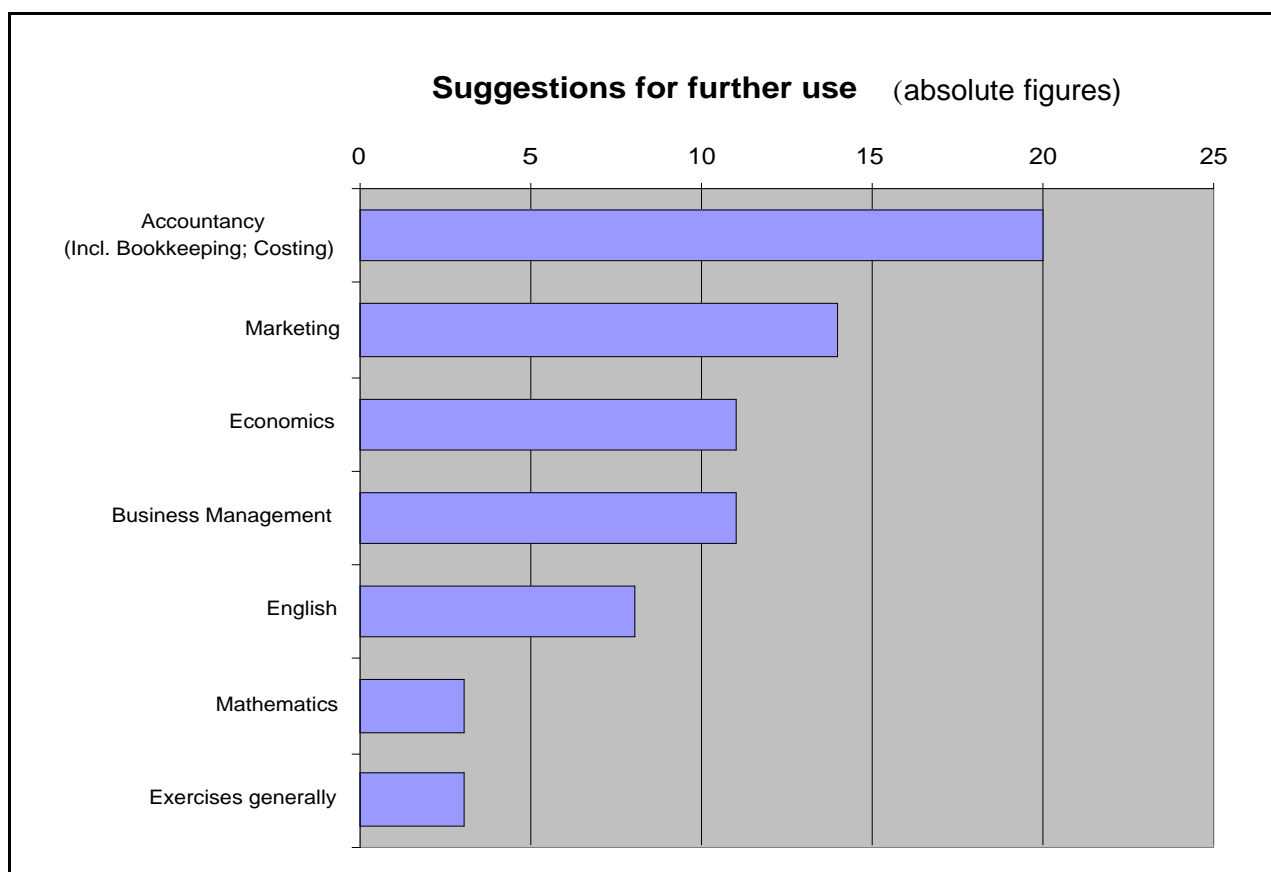


Figure 8. Potential subjects for further use

There seems to be heavy interest in CBTs for accountancy and marketing. However, before decisions for further developments are made, we suggest investigating the students' motivation for their proposals. In other words, it is crucial to know where these opinions come from. The interest in the use of CBTs in a subject does not necessarily mean that this subject is perceived as very appropriate for CBTs. It could also mean that the former content

presentation has been of poor quality; this includes the study material like scripts, books, and folios, as well as the lecturer's presentation.

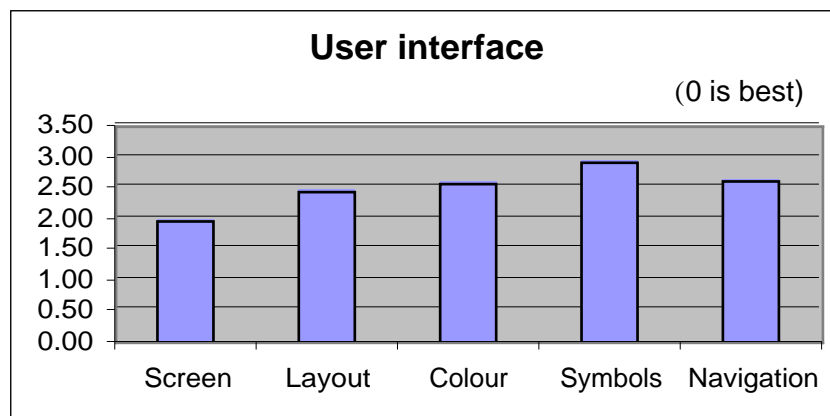


Figure 9. Assessment of the user interface

Finally, the user interface is valued with 2.53 on average. As can be seen from Figure 9, the symbols were rated far below average while screen arrangement appealed best.

4.2.2 Testing the hypotheses

After having described the concrete use of the CBT, the paper continues with testing the hypotheses presented in section 3.

All hypotheses are analysed by a test of the averages. All general acceptance factors (see model above) are analysed with the variables potentially influencing the CBT's acceptance.

H 1. There is a difference in the acceptance of the CBT by those who have already worked with a CBT and those who have not.

The acceptance of those experienced with CBTs is slightly higher than the acceptance of those inexperienced. Nevertheless, the difference is statistically not significant. We, however, believe that these results are due to an insufficient definition of the term multimedia in the questionnaire. (Tested with Man Withney U Test, see [17])

H 2. There is a positive relationship between the intensity of Internet use and the acceptance of the CBT.

We had heavy discussions if the Internet use could indeed be an influence factor. H 2 could not only be verified; surprisingly, the influence of Internet use on acceptance is higher than the influence of the experience with CBTs. (Tested with Kruskal Wallis Test, see [1])

H 3. The instructor has an influence on the acceptance of the CBT by the students.

H 3 was supported partly; the instructor does not have influence on general acceptance. However, more detailed analysis reveals that the instructor has a significant influence on the perceived joy and perceived joy is an important part of the general acceptance.

H 4. There is a gender-specific difference in the acceptance of the CBT.

Analysis did not show any gender-specific differences. Therefore, H 4 has to be refuted.

H 5. There is a negative relationship between age and the use of the CBT.

H 5 could be confirmed. The older the students are, the lower is the acceptance of the CBT.

H 6. There is a positive relationship between the perceived importance of the course and the use of the CBT.

As predicted, perceived importance of the course has a positive effect on the use of the CBT. This test was significant.

H 7. The more the CBT's functions are used, the higher the acceptance of the Hyperbook.

H 7 could be confirmed. The more the functions are used, the higher is the acceptance of the CBT.

H 8. The acceptance of the CBT is determined by the user interface.

Predictions of H 8 are supported. In fact, there is a strong relationship between the perceived quality of the user interface and the acceptance of the CBT.

5 Resume

The Hyperbook Privatrecht is a CBT that contains the basics of Austrian Civil Law. It was produced by the Mühlehner & Tavolato GmbH on the behalf of the University of Applied Sciences Vienna.

The acceptance was measured by a questionnaire after the first use during the summer term 2002. Additionally, factors of general importance for the acceptance of Hyperbook Privatrecht were examined.

The overall acceptance of the Hyperbook Privatrecht is 2.7 on a scale from 1 to 5 where 1 is best. As intended by the University of Applied Sciences Vienna, students used the CBT as an additional study material. To put it differently, apart from the traditional presence courses, the CBT supported students within their personal learning processes.

Heavy interest in the search function, the self-control exercises, and the links to legal texts reveals that there is an existing need for supporting features leading to an efficient learning process. Covering these needs, the Hyperbook Privatrecht provides an additional value that traditional study material cannot – and other CBT products often do not – offer.

The bookmark, history, and annotation functions did not gain high attention. Print function and marker were moderately used.

Despite the quite fair acceptance rate of the Hyperbook Privatrecht, 83 percent of the users are in favour of further implementations of CBTs or multimedia material within teaching. Most desired subjects for further developments are accountancy and marketing followed by economics and business management.

Many publications exist within the field of technology acceptance. Numerous models with many different factors have been discussed and empirically analysed. Not all of these factors could be considered in this survey. Nevertheless, our study revealed the following general factors to have a significant influence on the CBT:

- The Internet use (use of e-mail, research on the Internet, online-forums, chats, and online-games),
- the perceived importance of the course,

- age, and
- the instructor. The instructor has an influence on the perceived joy of the Hyperbook Privatrecht.

Not surprisingly, the product-based factors (functions and user interface) have a strong impact on the overall acceptance of the CBT.

Our survey confirms the value of multimedia study material within teaching. It cannot be denied that CBTs provide features for efficient teaching, which traditional methods cannot offer. Our survey points out that CBTs definitely offer the advantage of substituting scripts and books and parts of presence trainings.

References:

- [1] Bühl, A.; Zöfel, P.: SPSS 11 Einführung in die moderne Datenanalyse mit Windows. München: Addison-Wesley, 2002.
- [2] Degenhardt, W.: Akzeptanzforschung zu Bildschirmtext: Methoden und Ergebnisse. München: Fischer, 1986.
- [3] Eikebrokk, T.R.; Sørø, Ø.: Technology acceptance in situations with alternative technologies. <http://www.bi.no/dep2/infomgt/nokobit/nokobit98/papers/s22a.pdf> [found online 11 June 2002].
- [4] Fachhochschulrat: Bericht des Fachhochschulrates an die Bundesministerin für Bildung, Wissenschaft und Kultur gemäß § 6 Abs 2 Z 7 FHStG, BGBl Nr. 340/1993 i.d.g.F. über die Tätigkeit des Fachhochschulrates im Jahre 2000 - (FHR-Jahresbericht 2000). http://www.fhr.ac.at/4_publ/pdfs/jb2000.pdf [found online 23 July 2002].
- [5] Foulger, D.A.: Medium as Process: The Structure, Use, and Practice of Computer Conferencing on IBM's IBMPC Computer Conferencing Facility. Philadelphia: Temple University (Dissertation), 1990.
- [6] Hollingshead, A.B.; McGrath, J.E.: Computer-assisted groups: a critical review of the empirical research. In: Guzzo, R. A./ Salas, E., (publishers): Team effectiveness and decision making in organizations. San Francisco: Jossey-Bass, 1995; pp. 46-78.
- [7] Joseph, J.: Arbeitswissenschaftliche Aspekte der betrieblichen Einführung neuer Technologien am Beispiel von Computer Aided Design (CAD): Felduntersuchung zur Ermittlung arbeitswissenschaftlicher Empfehlungen für die Einführung neuer Technologien. Frankfurt am Main; Bern; New York; Paris: Lang, 1990.
- [8] Kollmann, T.: Akzeptanz innovativer Nutzungsgüter und -systeme: Konsequenzen für die Einführung von Telekommunikations- und Multimediasystemen. Wiesbaden: Gabler, 1998.
- [9] Limayem, M.; Hirt, S.G.: Internet-Based Teaching: How to Encourage University Students to Adopt Advanced Internet-Based Technologies?. In: Proceedings of the 33rd Hawaii International Conference on System Science. Maui: IEEE, 2000.
- [10] Mittrach, S.: Lehren und Lernen in der Virtuellen Universität: Konzepte, Erfahrungen, Evaluation. Aachen: Shaker, 1999.
- [11] Pauschenwein, J.; Jandl, M.; Koubek, A. (publishers): Telelernen an österreichischen Fachhochschulen – Praxisbeispiele und Möglichkeiten der Weiterentwicklung. Wien: WUV-Universitätsverlag, 2001.
- [12] Short, J.; Williams, E.; Christie, B.: The social psychology of telecommunications. London: John Wiley, 1976.
- [13] Simon, B.: Wissensmedien im Bildungssektor: Eine Akzeptanzuntersuchung an Hochschulen. Wien: Wirtschaftsuniversität Wien (Dissertation), 2001.

- [14] Ulijn, J.; Campbell, C.P.: Technical innovations in communication: how to relate technology to business by a culturally reliable human interface. In: IEEE Professional Communication Conference Record, 1999; pp. 109-120. <http://www.tm.tue.nl/vakgr/ok/ulijn/papers/ipcc991.doc> [found 18 December 2001].
- [15] Weber, M.: Evaluation von multimedialen Lernprogrammen als Beitrag zur Qualitätssicherung von Weiterbildungsmaßnahmen. Frankfurt am Main: Europäischer Verlag der Wissenschaften, 1998.
- [16] Wolfson, G.K.: prior learning assessment: a case study of acceptance of innovation and change. In: Proceedings of the 27th Annual SCUTREA conference. London, 1997; pp. 471-474.
- [17] Zöfel, P.: Statistik verstehen. Marburg: Addison-Wesley, 2000.

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Annex: Questionnaire**Einsatzevaluation– „Hyperbook Privatrecht“**

Der folgende Fragebogen dient zur Evaluation des Hyperbooks Privatrecht und dessen Einsatz im Unterricht. Die Gesamtevaluation der Lehrveranstaltung wird dadurch nicht berührt.

Der Gesamtaufwand für diesen Fragebogen beträgt ca. 5 Minuten Vielen Dank für Ihre Mithilfe!

Halten Sie Recht im Rahmen Ihrer Ausbildung für ein

- Sehr wichtiges Fach
- Eher wichtiges Fach
- Eher unwichtiges Fach
- Unbedeutendes Fach

Wozu verwenden Sie das Internet generell?

	Sehr oft	Oft	Selten	Gar nicht
Zum Versenden von Emails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zur Teilnahme an Diskussionsforen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zum Chatten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zur Recherche	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Zum Spielen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sonstiges: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Haben schon einmal mit anderen multimedialen Lernprogramm gearbeitet?
(egal ob online oder offline)**

Ja

Nein

**Wenn JA: Mit welchen multimedialen Lernmaterialien haben Sie gearbeitet?
(Bitte um kurze Beschreibung)**

**Sie haben das HyperBook Privatrecht beim Lernen verwendet – Welche Funktion hatte das Hyperbook beim Ihrem persönlichem Lernprozess?
(Nur eine Antwort)**

- zentrale Funktion, ich habe hauptsächlich mit dem Hyperbook gelernt
- gleichberechtigte Funktion neben anderen Lernmaterialien
- Nebenfunktion, ich habe es ergänzend eingesetzt
- Die Nutzung war technisch nicht möglich
- Ich mag am Computer nicht lernen, daher habe ich das Hyperbook nicht verwendet

Beurteilen Sie bitte Ihren Grad der Zustimmung für folgende Aussagen

	Stimme voll zu				Stimme gar nicht zu
Ich habe das Hyperbook beim Lernen als sehr nützlich empfunden	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Das Lernen mit dem Hyperbook Privatrecht hat mir Spaß gemacht	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Das Hyperbook Privatrecht ist einfach und übersichtlich zu bedienen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Welche Funktionalitäten des Hyperbooks Privatrecht haben Sie verwendet?

	Oft	Manchmal	Selten	Gar nicht
Textmarker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Verfassen von Anmerkungen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Setzen von Lesezeichen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suchfunktion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Druckfunktion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Historyfunktion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Links zu Gesetzestexten	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Selbstkontrollübungen	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Gibt es Funktionen, die sie bei der Benutzung des Hyperbooks Privatrecht vermisst haben?

Ja

Nein

Wenn JA: Welche?

Folgende Aussagen beziehen sich auf die Gestaltung der Benutzerschnittstelle. Beurteilen Sie bitte Ihren Grad der Zustimmung!

	Stimme voll zu				Stimme überhaupt nicht zu
Die Bildschirmteilung ist übersichtlich	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Das Seitenlayout ist ansprechend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Die Farbgestaltung ist ansprechend	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Die Verwendung der Symbole ist verständlich	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Die Werkzeuge zur Navigation sind verständlich	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Abschließend möchten wir Sie noch im einen persönlichem Kommentar zum zum Hyperbook Privatrecht bitten: Was hat Ihnen beim Hyperbook Privatrecht besonders gut, und was hat Ihnen überhaupt nicht gefallen.

Besonders gut gefallen hat mir 😊

Überhaupt nicht gefallen hat mir ☹️

Würden Sie den Einsatz von HyperBooks in anderen LVs begrüßen?

Ja

Nein

Wenn JA: In welchen LVs würden Sie den Einsatz von Hyperbooks begrüßen?

Wenn NEIN: Warum können Sie sich den weiteren Einsatz von Hyperbooks im Unterricht nicht vorstellen?

Persönliche Angaben:

Geschlecht:

Männlich

Weiblich

Alter:Jahre

Vielen Dank für Ihre Mithilfe!