WEBFOLIO APPLICATION IN PRIMARY EDUCATION:
Qualities and Usability of Webfolio System

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ABSTRACT

In today's world, educational establishments should follow and utilize technological developments in order to improve the quality of educational activities. One of the fields that technology can be integrated into educational establishments is evaluation. There is a tendency of process evaluation in today's evaluation field, and portfolios are among these process evaluation tools. In order to provide a faster and easier process, portfolios have been prepared in electronic settings and transformed into e-portfolios. Moreover, in time, e-portfolios had to be moved into web to improve their efficiency, and web-based-portfolio (Webfolio) emerged.

The aim of this study is to identify the qualities of products, which came up as a part of webfolio application applied in primary education, and to determine the use of webfolios both by students and teachers. In this study, which aims to determine how effective webfolios are, one of the qualitative research designs, Natural Inquiry Approach was preferred. In this study, one of the purposeful sampling methods, criterion sampling was used was held in a private school connected to National Education Directorate of Eskisehir in 2008-2009 academic year spring term.

Webfolios prepared by students, assignments given by the teacher, and other digital data available in webfolio system were used as data collection tools. When student webfolios were examined concerning their quality, most webfolios prepared by the students were found to be qualified enough in terms of readability, authenticity, timeliness, and the use of media sources. However, most of the student webfolios do not have a systematic design.

The assignments given by the teacher was determined to be readable, clear, and has no misspelling.

It was also observed that the teacher urged students to deliver their webfolios in time, suggested the use of class book and the Internet. Students, in their webfolios, preferred using text, picture and tables, but did not prefer to use video sources.

Keywords: Web-based portfolio, webfolio, student webfolios, classroom teacher

INTRODUCTION

When electronic portfolios were prepared for the web and customized, and uploaded to the web, they were named as webfolios (Web-based electronic portfolios) (Watkins, 1996, cited in Avramamidou and Zembal-Saul, 2006). Webfolio is defined as integrated collection of educational program standards, assignments given by the teacher, products by the students in accordance with the assignments the teacher gave, and web-based multimedia documents where evaluation and comments about student works are placed (Gathercoal, Love, Brydeve McKean, 2002).

Webfolio is a special structure where modern communication technologies are used (HTML, word processor programs, Adobe Acrobat, etc.), where all kinds of electronic materials can be kept, and where students, teachers, advisors and managers can function in a harmony. Webfolio, enables all partners to cooperate in terms of academic improvement of the students (Kendus, 2002; Bartell et.al., 2001 cited in Gathercoal et.al, 2002). As a system, webfolio provides significant benefits for students, teachers, schools and other participants by integrating a series of various "best" educational activities in one place (Gathercoal, Love, Bryde and McKean, 2002). Webfolio is a system where all works produced by students and teachers can be kept. Student gains, summaries of classes and projects, and assignments can be collected in their portfolios which is available to be reached at all times (Campbell and Moore, 2003). Webfolio system, provides knowledge and needs analysis to improve and utilize the program along with reflective and result analysis by integrating evaluation and reporting in web-based portal (Karayan and Gathercoal, 2006).

Problems like physical space, transportation and access can be easily overcame with the help of webfolios; however, uploading portfolio files on a web space does not necessarily mean to be a webfolio system. All the information concerning the portfolio (student products, assignments given by the teacher, evaluation about student products, viewer comments, program standards and assignment classifications etc.) should be placed in database and an effective interaction system should be formed (Herner et.al., 2002). In order to benefit from webfolios, all the partners should attend to the process.

Moreover, educational program standards, assignment, responses of the students to portfolio studies, feedbacks provided by the teacher related to student works should be integrated effectively (Gathercoal, Love, Bryde and McKean, 2002).

Various studies conducted on webfolio system proved that webfolio system provides many benefits since it increases learning performances of the students (Chang, 2008), provides convenience (Driessen et. al., 2007), enhances student collaboration (Hastie and Sinelnikov, 2007), and facilitates student-centered teaching method (Avraamidou and Zembal-Saul, 2006). Although webfolio system is used in various education levels commonly, there are not many studies concerning its use especially in primary education.

Thus, there is a need for determining how effective webfolios used in primary education both by students and teachers, and evaluating the quality of the products emerged. In this respect, this study focuses on how effective teachers and students use the webfolio system, and the quality of the products emerging from the use.

THE AIM OF THE STUDY

The main aim of this study is to determine the quality of the products emerging from a webfolio application in primary schools, and to define the level of the use of webfolio system both by students and teachers. In this respect, the following questions were asked:

> - What quality does students webfolios and teachers assignments has?
> - What is the usability level of the webfolio system by teachers and students?

METHODOLOGY

Research Model
In this study, which aims to determine how effective webfolio application is used, and the quality of the webfolios, naturalistic inquiry approach, one of the qualitative research designs, was implemented.

Naturalistic inquiry approach is a paradigm, which determines the examination type of a research, and directs the research in one way, and held in a totally natural environment (Gubaand Lincoln, 1982). In this approach, researcher can collect data by utilizing various data collection sources. Interviews, observation, document analysis, etc. can be the sources for data collection, and then the data collected are analyzed by the researcher (Erlandson, Harris, Skipper and Allen, 1993; Lincoln and Guba, 1985).

Participants of the Study
In this study, a purposeful sampling method, criterion sampling was used. The study was conducted in 2008-2009 academic year with fourth grade students and their teacher in the primary school within MAT-FKB Private Gelisim Schools connected to Eskisehir provincial Directorate of National Education. Among 10 male and 8 female students who took part in the study, 14 of the participants had Internet connection in their houses. Although 4 students did not have an Internet connection in their houses, these students were able to take part in the study by connecting to the Internet in the school and other environments, and the experiences that the students had about the webfolio system were also mentioned in the study.

The teacher had necessary qualifications that would be needed in the study, thus she was chosen to be a participant of the study. Along with these, the teacher improved herself in computer use by attending computer courses, and had an educational materials development certificate. Moreover, that the teacher prepared his own web site, and was the administrator of her website made him the perfect participant since such qualifications would add a lot to the study in terms of the use of webfolio system.

The Application of the Study
The webfolio application was held in 2008-2009 academic year and lasted for one term. Students and the teacher were informed through a seminar on the use of webfolio system before the application of this study. Then, a two-week pilot study was held so that flaws of the system were defined and updates were made in the light of suggestions. After the pilot study, the main study started. The study was conducted on four main classes provided in the fourth grade, which are Science and Technology, Mathematics, Turkish, and Social Sciences.

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The webfolio system consists of two main modules. These are "student panel" and "teacher panel". According to this, when a student logs on to webfolio system, she is directed to student panel; likewise when a teacher logs on, she is directed to teacher panel. Teacher panel consists of "giving feedback to student webfolios", "answering student questions", assignment management", "personal information", and "personal web page". Student panel, on the other hand, consists of "webfolio management", "asking questions to the teacher", "giving peer-feedback", "personal information", and "personal web page".

Data Collection Tools

Webfolios prepared by the students, assignments given by the teacher and other digital data available on webfolio system are used as data collection tools. The digital data used in the study consist of questions and answers formed by teacher and the students, feedback, evaluation process, personal information, and personal web page.

Teacher data in the webfolio system are assignments given to the students and other data collected throughout the teacher's use of the system. Student data, on the other hand, webfolios that students prepared, peer feedback that students provided for their peers, and data formed by the use of webfolio system.

Data Analysis

Along with the data gathered in research scope, data formed by feedback and questions between teacher and students were also analyzed in terms of the aims of the study.

An evaluation form was formed for the researcher and an expert in the field to use in order to make document analysis of student webfolios and assignments given by the teacher. In this respect, qualities that portfolios should have were examined by reviewing the literature. Then, these qualities were used to create an evaluation form to create a standard in the analysis of the qualities of webfolios. In the next step, these themes that appeared form the study were shown to experts on the field and document analysis and their opinions were asked. Necessary corrections were made according to expert opinions and the form was shown to the experts the second time. The final form was given to the evaluation form after the corrections.

Student and teacher data were examined and collected by the researcher with the aims of the study. Then, these data were digitized and themed. In terms of reliability, both the processes of digitizing, and the process of forming themes and placing data on these themes were done by the researcher and another independent researcher; later an agreement was reached, and the analysis were finalized.

RESULTS AND DISCUSSION

In order for findings and discussion to be systematic, they are discussed under four headings parallel to research questions; qualities of the student webfolios, qualities of assignments given by the teacher, the use of webfolio system by the students, and the use of webfolio system by the teacher.

Qualities of The Student Webfolios

After the application of the study, student webfolios were converted into documents and analyzed through document analysis.

Webfolios prepared by students were evaluated by the standards created by the researcher after webfolio application. Webfolios were reviewed qualitatively according to these qualities; not only that, but also assignments given by the teacher and other specifications that might have an effect were also associated. The standards used in the analysis of webfolio qualities were given in the following table.

Table: 1
The Standards Used in the Analysis of Webfolio Qualities

Standards Used in the Analysis of Qualities	Sub-Standards	Evaluation
Readability	• Readable font use • Readable font color choice • Readable background color choice • Readability	If at least one of the mentioned standards were not met, the student was considered unsuccessful.
Authenticity	• The student should not copy out of sources like books, the Internet etc. • The student should not copy from his friends	If at least one of the authenticity issues is broken, the student was considered unsuccessful
Up-to-dateness	• Making use of up to date information sources	If the mentioned standard was not met, the student was considered unsuccessful.
Systematicity	• Providing the content of webfolios systematically	If the mentioned standard was not met, the student was considered unsuccessful.
Use of Media Sources	• Pictures • Photo • Video • Sound file • Other media sources	If at least one of the standards was met, the student was considered successful
Media sources-content suitability	• Visualizing the content • Diagraming the processes • Explaining a process	If media sources were used in terms of at least one of these standards, the student was considered successful
Punctuation and Spelling	• Turkish Language Society Standards	The content of webfolios not matching the standards determined by the Turkish Language Society was considered to be unsuccessful.

At the end of the webfolio application, there emerged 97 portfolios belonging to students.

As for the first control of the portfolios, 22 of them excluded in terms of not starting at all, or starting but did not continuing, since they did not have the qualities to make a document analysis. The remaining 75% of the portfolios were taken into consideration.

In the step where the quality of student webfolios is evaluated, webfolios first evaluated in terms of *readability.* When student webfolios were examined, it was seen that while some students made mistakes that reduce the readability, others did not make those mistakes. The sample related to the correct use of colors to improve readability was given in figure 1.

Figure: 1
Sample Related to the Correct Use of Colors

While adding font colors, some students, actually accidentally, chose unsuitable font colors making their webfolios unreadable. Related webfolio sample was illustrated in figure 2.

Figure 2:
A Webfolio Sample Related to Insignificant Font Color Choice

Among other mistakes that students made in terms of readability are unreadable font or background color choice, unsuitable font use, writing the words next to each other, unsuitable font styles use etc. in the analysis it was found that 79% of the student webfolios were readable.

In evaluating student webfolios according to quality, secondly, *authenticity* standard was taken into consideration.

While evaluating student portfolios in terms of authenticity, whether the student copied from the Internet sources or his friends' webfolios was taken into consideration. Although there are a lot of different search engines, since Google is the most commonly used one, Google search engine is used to compare students' webfolios with websites on the Internet.

Thus, this gave an opportunity to researcher to decide whether the content in the student webfolio was taken from an Internet source or not. When student webfolios are analyzed in terms of authenticity, it was seen that 76% of the portfolios were authentic.

The evaluations revealed that web sites providing assignment, forums, blogs and other related sites were used. Moreover, some contents were found more than one forum, blog, or homework sites. Furthermore, it was also found that some of the students who prepared unauthentic webfolios copied the same content. This reveals that either the students were affected by each other, or used the sites that appear in the first lines at a search engine.

When webfolios of the students who copied content from the Internet, it was seen that their peers realized that the content was a copy.

They warned their friends by providing peer-feedback. Thus, it is obvious that peer-feedback application in webfolio system increased the authenticity of webfolios.

Another standard to evaluate the quality of student webfolios is the *up to dateness*. In this standard, whether webfolios have up to date and true information or not was taken into consideration. When webfolios are considered according to whether they have current information, it is seen that all the webfolios present up to date and true information.

The fourth standard concerning student webfolios is *systematicity*. When student webfolios were evaluated in terms of systematicity, it was evaluated whether the content was presented in a specific order or not. In the evaluation in terms of systematicity; making an introduction after the title, and then giving related examples, and supporting the content with media sources were taken as the basis.

The analysis showed that 36% of the student webfolios met the systematicity standard. When webfolios, which were not suitable in terms of systematicity, analyzed it was seen that there was no introduction or explanation to the topic, and there were direct examples and explanation of these examples followed.

The qualities of student webfolios were also evaluated in terms of *the use of media sources.* First, the webfolios were evaluated in terms of whether they used some kind of media sources or not, then, the webfolios which were determined that they used media sources were analyzed to find out what kind of media sources were used. When student webfolios were analyzed in terms of the use of media sources, it was seen that 72% of the webfolios used at least one type of media sources.

When media sources found in webfolios were analyzed, it was also seen that students did not prefer to use sources like videos and sound files, but frequently used pictures and photos.

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The analysis of the pictures showed that students used a lot of animation pictures along with photos.

After webfolios including media sources were identified and analyzed, a re-analysis was applied to find out whether media sources were used in accordance with content.

This re-analysis revealed that the content and the media source used are in accordance in 89% of the student webfolios.

When reason of the use of media sources were analyzed, it was observed that students used media sources to "visualize the content", "schematize a calculation", and "explain a process". A sample concerning this point is presented in figure 3.

Figure: 3
A Webfolio Sample Related to Schematizing a Calculation

Some students, while preparing their webfolios, used media sources, which were unrelated to the content.

When these media sources were analyzed, it was seen that appealing but unrelated pictures like "smilies" were used to improve attraction.

Lastly, Student webfolios were analyzed in terms of *punctuation and spelling rules.* As a part of spelling and punctuation rules; standards concerning correct use of punctuation marks, following spelling rules, and writing the words correctly were taken into consideration.

When student webfolios were analyzed in terms of punctuation and spelling rules, it was seen that 89% of the webfolios were suitable.

When webfolios which did not follow punctuation and spelling rules were analyzed, the mistakes that students made were defined as "punctuation errors", such as starting a sentence in lower case", and "spelling mistakes".

Qualities of Teacher Assignment

Table: 2
Standards Used in the Analysis of Qualities of Assignment

Standards Used in the analysis of Qualities of Teacher Assignment	Substandard	Evaluation
Clarity	The use of clear language	If the language used was clear, it was considered successful
Richness of the Sources	• Internet • Course book • Magazines • Experts • Library • Other Sources	If , at least, three sources were used in giving assignment, it was considered successful
Evaluation Standards	• Making use of various sources • Adding up to date information • Completing in time • Following spelling rules • Writing Systematically	If, at least, three evaluation sources were used in giving assignment, it was considered successful
Punctuation and Spelling	Standards determined by Turkish Language Society	The uses not matching the standards determined by the Turkish Language Society were considered to be unsuccessful.

The qualities of assignments given by the teacher were defined in webfolio application, and features and factors that broke the quality, if applicable, were determined. Standards used in the analysis of teacher assignments are presented in Table: 2.

Title, beginning and due date of the assignment, explanations about the assignment, information sources, and evaluation criteria are the compulsory fields to be filled by the teacher in the webfolio system.

During webfolio application, the teacher gave ten assignments. All these assignments were analyzed, and were investigated in terms of readability, richness of the sources, evaluation standards, and punctuation and spelling rules. Because there was not a rich text editor in the field where the teacher uploaded assignments, no mistakes like wrong text or background color use, wrong font characteristics use, etc. moreover, when the explanations made by the teacher were analyzed, it was seen that the teacher made clear and concise explanations that all the students could clearly understand. When *readability* of teacher's assignments was analyzed, all the assignments were found to be appropriate.

Teachers given assignments were also analyzed in terms of *richness of the sources*. In the analysis of this aspect, richness standard was accepted to be at least three sources be provided by the teacher. The analysis revealed that, the assignments given by the teacher provided at least three sources for each assignment.

In the scope of the study, the sources that the teacher suggested were also evaluated. The sources that the teacher suggested are presented in Table: 3:

Table: 3
Sources Suggested in Teacher Given Assignment

Sources provided to students by the teacher	f
Course book	10
Internet	10
Libraries	4
Elder Family Members	3
Teachers	2
Reference Books	1
Science Magazines	1
Magazines	1
Workers that students can reach	1
Encyclopedias	1

When the sources that the teacher suggested were analyzed, it was seen that course book and the Internet were suggested mostly, followed by library, elder family members, and teachers. The least suggested source appeared to be encyclopedia. When sources provided by the teacher were analyzed, it was seen that the teacher provided a common sources. For example, instead of providing a web site or sites in reference lists, the teacher mentioned only "the Internet". Similarly, instead of suggesting a specific book or a magazine, she preferred to suggest them as library, magazines and reference books.

Teacher's assignments were also analyzed in terms of *evaluation standards* that the teacher herself provided. In terms of evaluation standards, at least three standards were considered sufficient. When teacher's assignments were analyzed in terms of evaluation standards, 80% of the assignments were considered to be sufficient. Moreover, the analysis also showed that the teacher insisted on finishing webfolios in time. Other most important criteria the teacher followed were following spelling rules and giving correct information. Other than these the teacher also used standards like making use of various sources, order, and suitability to the aim of the assignments, etc.

Another analysis criteria used when analyzing teacher's assignments was *punctuation and spelling rules.* Examination of the assignments revealed that punctuation and spelling use of the teacher was sufficient in 70% of the assignments. The analysis also revealed what kind of mistakes the teacher made in the use of punctuation and spelling. According to this, the teacher only made some basic keyboard mistakes (adding one more letter mistakenly, or misplaced letters etc.).

The Use of Webfolio System by the Students
Student data in webfolio system were analyzed in order to find out to what extend the students were able to use the webfolio system. In this respect, what features were students able to use, what features were problematic, and what features students never used were scrutinized.

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Webfolio system features   take into consideration in order to determine the usability level by the students were "using webfolio editor", "using peer-feedback system", "filling in personal information", "creating a personal web page", and "using question and answer system".

The first feature in determining the use of webfolio system is *the use of webfolio editor.* When student data in the webfolio system were analyzed, it was seen that students used text formatting to transform a text bold, italic, underlined form, picture feature to insert pictures, and coloring feature that helped them change the color of their font and background. The frequency of the features is presented in Table: 4.

Table: 4
Data Related to How Effective the Students Used Webfolio

How Effective the Students Used Webfolio	f
Coloring	17
Inserting Pictures	17
Text Formatting	16
Adding Bullets	4
Adding links	3
Adding Tables	1

As seen in Table 4, the students preferred to use coloring and inserting pictures features the most. Adding links and tables were among the least used features. When the use of webfolio editor features was analyzed, it was seen that sophisticated features like adding video files, sound files, and flash animations were not used. Moreover, features like adding bullets and links were also among the least used features. It could be said that students either had difficulties in the use of these features, or did not need to use them.

One of the features of webfolio system is that students could give each other *peer-feedback.* After students complete their webfolios, they activate peer-feedback setting in "peer-feedback" menu available in their webfolio system before sending their webfolio to the teacher. This way, their friends could provide peer-feedback to the students who activated their peer-feedback settings. Moreover, students could not see who they were giving feedback to. Hence, students were made sure to provide correct feedback in an academic manner. When webfolios were analyzed, it was clear that most of the students got peer-feedback support. Moreover, students helped their friends by providing peer-feedback. The document analysis revealed that all the students, except for two students, activated peer feedback setting in their webfolios, and got peer-feedback from their friends.

Another part of webfolio system is the *personal information* tab. This part is not related to webfolio preparation. In this part, students were able to write the e-mails, mother and father names, etc. Although this part was not completely related with the preparation of webfolios, this information could be seen in "student" tab in teacher's menu, thus it was considerably important for the teacher. When personal information tabs of the students were analyzed, it was seen that all the students filled in the necessary information.

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Another feature in webfolio system was "personal web page". In this part, an editor having the same characteristics as webfolio editor was used. Hence, students were able to make use of features such as inserting pictures, sound files and video files, and adding links etc. when student web pages were analyzed, it was seen that 8 students out of 18 prepared their web pages; remaining 10 students did not form a web page. The analysis of the web pages revealed that some students put their web pages a welcome note, and provided various information like the pop stars they like, and football teams they support.

Another feature of webfolio system is *"question and answer system".* With the help of this system, students were able to ask or consult the teacher questions or points to be clarified even after school hours. The analysis revealed that most of the students used question and answer feature effectively. 16 out of 18 students used the system. Document analysis revealed the aim of the students in the use of question-answer feature. The aim of the students in the use of question-answer feature is presented in Table: 5.

Table: 5
Data Concerning the Use of Question-Answer System

Data Concerning the Use of Question-Answer System	f
How much time left?	7
I finished assignment. Can I send?	3
How am I going to send my assignment?	2
Did you like my assignment?	1
I cannot save my assignment?	1
I cannot insert pictures?	1
What else should I add to my Assignment?	1

When the questions asked by the students were analyzed, it was revealed that the most common question was "how much time left". This was followed by asking to send the assignment to the teacher, and in what way the assignment is sent. Students also asked questions to learn whether the teacher liked their assignment, or how to insert pictures.

The use of Webfolio System by the Teacher
Likewise in the students, how effective the teacher used webfolio system and in what points she had difficulties were also taken into consideration. In this respect, standards like "the use of question-answer tab", "the use of teacher feedback system", "forming personal information tab", and "preparing personal web page" were considered.

One of the activities that the teacher did in the webfolio system was to provide feedback to the questions asked by the students in the question-answer tab. Students were able to ask questions out of the school hours, too.

Thus, teacher should have spared some time to answer these questions. When data were analyzed, it was seen that teacher tried to provide clear and concise answer to the questions.

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Another feature of webfolio system is "*teacher feedback system".* Teacher provided feedback to the assignments completed by students in the webfolio system. The feedback the teacher provided for the completed webfolios were analyzed. The analysis revealed that the teacher approved webfolios if they meet the criteria; otherwise, sent the webfolios back so that students could make necessary improvements.

When data in *personal information tab* of the teacher were analyzed, it was seen that teacher did not provide information like his e-mail. The teacher probably did not feel the need to provide her e-mail since she was the only teacher in the system, and students could not see that information.

Another field that teacher could fill in the webfolio system was *personal web page* tab. Teacher was able to create a personal web page in this field. However, the analysis revealed that teacher did not form a web page.

RESULTS AND DISCUSSION

According to the data gathered throughout the study, most of the student webfolios have readability. Moreover, students were able use colors correctly in order to improve readability. Mistakes that decrease the readability, and that students made while preparing their webfolios are unreadable font choice, insignificant background color choice, writing the words close to each other, unsuitable font use. Most of the webfolios students prepared are authentic. However, contents that can be found in homework sites, blogs, and forums were found to have been used in some of the student webfolios.

Students made use of up to date sources of information in their webfolios. Students, by making use of sources such as the Internet, reached at up to date information, and used that information in their webfolios. Most of the student webfolios do not have a systematic structure. It was seen that most of the webfolios do not have an introduction or explanations, but supported with multi-media sources, by giving direct examples. Students preferred to use media sources in their webfolios. While pictures, photos, and animations were preferred as multimedia, sources like sound files or videos were not.

Most of the media sources used in student webfolios are compatible with webfolio content. Students used media sources in their webfolios to visualize, schematize the content, and to explain the process. On the other hand, the media sources, irrelevant to the content, were used in order to increase visualization. While the content was being formed in webfolios, students took care of punctuation spelling rules. But, there are also webfolios that have a lot of punctuation and spelling mistakes. In this respect, the most common mistakes were starting a sentence in lower case and spelling mistakes.

In general, the quality of the webfolios that students created is considered to be sufficient enough.

This finding is in parallel with the study, which stated that students created webfolios in the same quality as traditional portfolios, conducted by Driessen et.al (2007), and titled "Web or Traditional Portfolios: Is There a Difference?"

The assignments given by the teacher had quality in terms of readability and clarity. Teacher gave assignments clear enough for students to understand easily. Moreover, the teacher preferred to provide course book and the Internet as the sources for assignment. Furthermore, library, elder family members, teachers, other source books, magazines, the workers around and encyclopedia were among the sources the teacher suggested to students.

As an evaluation standard, the teacher gave importance to webfolios being finished in-time. Along with this, following spelling rules, using correct information, making use of various sources, cleanliness and order, and preparation compatible with the aim of assignments are other standards the teacher gave importance. In giving assignment, the teacher did not make any spelling or punctuation mistakes.

Students were able to use some features of webfolio editor such as inserting colored text and background color, adding pictures, text formatting, inserting links to other sources or pages, and adding tables. However, students were not able to use sources such as sound files, video files and flash content. Most of the students got peer feedback about their webfolio by activating peer-feedback settings. Moreover, by organizing their webfolios according to the feedback they got from their peers, they were able to create more qualified webfolios before sending them to the teacher.

Most of the students filled the personal information in webfolio system. Some students, on the other hand, presented all the information except for their e-mails. Most of the students created their personal web-pages. They inserted content and pictures that they have an interest with.

Most of the students made use of question-answer system to ask questions to the teacher. They used the system to be informed about the time left, to ask the teacher whether to send their webfolios, to learn how to send their webfolios, and to be informed about some technical issues.

The teacher answered student questions with the help of question-answer system. She answered questions related to both the webfolio system and technical issues. The teacher examined the webfolios and approved the ones she considered sufficient.

She sent the ones which were not sufficient or sent by mistake back to be developed. The teacher did not fill in personal information file and did not create his own web page.

In light of the findings of this study, following suggestions were proposed:

> In order to improve quality of education in primary schools, webfolio system must be used by primary school teachers and students.
> For the maximum efficiency of webfolio system, teachers and students should learn how to use webfolio system.

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