Tıbbi Dokümantasyon ve Sekreterlik Öğrencileri ile Bir Portfolyo Çalışması

A Portfolio Study with The Students of Medical Documentation and Secretariat

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Anahtar Sözcükler:
Ölçme ve Değerlendirme, Portfolyo, Alternatif Değerlendirme Yöntemleri, Tıbbi Dokümantasyon ve Sekreterlik

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Amaç: Bu çalışmanın amacı, İzmir Ekonomi Üniversitesi Sağlık Hizmetleri Meslek Yüksekokulu Tıbbi Dokümantasyon ve Sekreterlik Programı öğrencilerinin Klinik Eğitim Uygulaması dersi kapsamında hastanede gerçekleştirdikleri çalışmaları, iş üzerinde öğrendiklerini, düşüncelerini alternatif bir değerlendirme yöntemi olan portfolyo aracılığıyla görünür kılmalarını sağlamaktır.

Gereç ve Yöntem: Araştırma vaka çalışmasıdır. Veriler portfolyo ve dönemin sonunda öğrencilerle yapılan yarı yapılandırılmış görüşmeler ile toplanmıştır. Nitel verilerin analizinde içerik analizi yöntemi kullanılmıştır.

Bulgular: Portfolyo değerlendirmesinin öğrencilere ve öğretim üyelerine ayrıntılandırılmış bilgi verebildiği saptanmıştır. Portfolyo öğrencileri öğrenmeye ve öğrenmelerinin sorumluluğunu almaya yönlendirmektedir. Ayrıca öğrenci öğretim üyesi etkileşimini arttırmaktadır. Öğrenciler portfolyo çalışmasının öğrenmelerini kolaylaştırdığını, protfolyolarında yer alan materyalleri hazırlarken gerçek iş yaptıkları algısı oluştuğunu, yaptıkları iş ve öğrendikleri üzerinde yeniden düşündüklerini ve yazarak bilgi verirken yazma becerilerinin geliştiğini bildirmişlerdir.

Sonuç: Bu çalışmanın bir sonucu olarak, portfolyo değerlendirme yönteminin Sağlık hizmetleri meslek yüksekokulu öğrencilerinin eğitiminde alternatif bir değerlendirme aracı olarak kullanılabileceği tavsiye edilmektedir.

Abstract
Background: The developments in the field of education in recent years have had a profound impact on medical education as well as other fields of education. The reflections on how the on the job, applied activities of medical education are to be assessed draws special attention. Nowadays, an alternative measurement and assessment method to assess the student is the portfolio programs.

Aims: The aim of this study is to present students' opinions on the use of portfolio, which is developed as an alternative assessment tool that enables the students of Medical Documentation and Secretariat Program in the İzmir University of Economics Vocational School of Health Services to make visible their on the job studies at the hospital within the scope of Training in Clinical Education course.

Study Design: Research is conducted with the use of a case study method. Data is gathered through by portfolio and semi-structured interviews with the students conducted after the program. Content analysis method is used to analyse the qualitative data.

Results: It is found that portfolio assessment method presents more detailed information to the student and the faculty, that it encourages the student to learn and take responsibility in learning and that it increases student-faculty interaction. Students state that portfolio program contributes to their learning, that they could think over what they have learned retrospectively and that they have improved their writing skills.

Conclusion: As a result of this study, it is suggested that portfolio assessment method could be used as an alternative tool of assessment in the field of vocational school of health services' students education.

Introduction

Over the last 20-30 years there has been increasing awareness of the need to develop new assessment tools. We use these tools and want to ensure a high degree of validity and an acceptable level of reliability (1).

Portfolios are widely used in all stages of education from elementary school through to vocational and Professional programmes (1). Portfolios are not new but their use in medicine is still in its infancy. Hall defines a portfolio as "a collection of material made by a Professional that records and reflects on key events and processes in that Professional career" (2). It is usually paper based but it may also include anything that provides appropriate evidence of learning and achievement, such as video, audio recordings or photographs (3). It is a special form which monitors the student's own development and also makes the student's work visible (1).

A portfolio is a collection of papers and other forms of evidence that learning has taken place (4). It is a collection of student work that exhibits the student's efforts, progress and achievements in one or more areas (5). Portfolio also encourages learners to take responsibility for their own learning and guides the learners to accumulate evidence of learning, while incorporating a criterion-referenced interpretation of their performance (6). Portfolio is used within this course in order to make visible the student's practice at the hospital.

Pros of portfolio-based learning can be summarized as (3; 7):

i. It recognizes and encourages the autonomous and reflective learning;

ii. It is based in the real experience of the learner, and so enables the consolidation of the connection between theory and practice;

iii. It allows a range of learning styles to be used according to the preferences of the learner;

iv. It enables assessment within a framework of transparent and declared criteria and learning objectives;

v. It provides a process for both formative and summative assessment, based on either personally derived or externally governed learning objectives;

vi. It provides a model for lifelong learning and continuous professional development.

And cons of portfolio-based learning are (3; 7);

i. It may have low reliability

ii. Sometimes, it takes too much time to evaluate a student with portfolio.

iii. It can be difficult to construct a criteria-

referenced interpretation of students' performance.

iv. Portfolio is kind of an art collection that cannot be easily be analysed.

v. Difficulty about analysing the portfolio

Beside these disadvantages, portfolio is becoming increasingly accepted as a valuable tool for learning and assessment. The validity of portfolio assessment, however, may suffer from bias due to irrelevant qualities, such as lay-out and writing style.

Reflection is the integral part of the Professional portfolio. Through this process, retrospective reflection and analysis of past learning are synthesized into learning that will influence future changes in practice, and the identification of individual needs, resulting in a learning plan. The portfolio thereby has the potential to provide the perfect tool for the synthesis of adult learning and reflective practice (3).

In this study, we examined the possible effects of such qualities in a portfolio program aimed at stimulating Year 2 documentation and secretariat students to reflect on their professional and personal development. In later curricular years, this portfolio is also used to judge vocational competence.

This article describes the portfolio, which presents a record of practical work carried out in the hospital in September-February 2014-2015 academic term for the course "Training in Clinical Education (TDS 215)".

This study aims to collect the work of students prepared by portfolio and to reflect the students' opinions on portfolio program conducted in Training in Clinical Education (TDS 215) course. Within this framework, the question of the research is "What are the opinions of students on the portfolio program conducted in the course "Training in Clinical Education (TDS 215)"? The following sub-questions are determined in line with the aim of the research:

i. What are the general opinions of the students regarding the portfolio program?

ii. What are the opinions of the students regarding the benefits of portfolio program?

iii. What are the opinions and suggestions of the students regarding the problems of portfolio program they encounter?

Material and Methods

This research is a descriptive study and is conducted by the use of case study method.

This study is conducted with the participation of Year 2 students of the Medical Documentation and Secretariat Program of the İzmir University of Economics Vocational School of Health Services. 18 students who take the course "Training in Clinical Education (TDS 215)" in the 2014-2015 education term forms the study group. Study data were collected between September 2014 and February 2015.

Firstly, the main components that will constitute the content of the portfolio, which would be applied, were tried to be determined by using various sources.

Moreover, exercises within the portfolio are designed in a way to give feedback to student and teacher about the performance of the student. The aim of each exercise and criteria of assessment forms are stated in an explicit manner. The portfolio used in this study contains exercises regarding the student's problem solving capability and evidence showing student's work on the job.

The first page of portfolio contains the student's demographic variables, giving the learner's name, year of training and supervising clinician. Included in the portfolio content were records of the student's activities during the period of the course, which were signed by the supervisor. A list of the learning objectives whose achievement the evidence in the portfolio claims to demonstrate; a short reflective overview, summarizing the learning, and indicating which items of evidence relate to which learning objective the evidence itself.

Two scholars, who are the lecturer of this

course, were consulted for their opinions on the structure of assessment forms in the portfolio and their applicability within the system.

At certain intervals, lecturers gave feedback to the students about their performance.

Student opinions on portfolio assessment program are collected through "Semi-Structured Student Opinion Form". The following open-ended questions are in the opinion form:

i. What are the general opinions of the students regarding the portfolio program?

ii. What are the opinions of the students regarding the benefits of portfolio program?

iii. What are the opinions and suggestions of the students regarding the problems of portfolio program they encounter?

The lecturers of the course were prepared the semi-structured form for content validity. After seeking for content validity, form was finalized. Program lasted for 16 weeks (8 course hours per week) during 2014-2015 fall term in the course Training in Clinical Education of Medical Documentation and Secretariat Program of the İzmir University of Economics Vocational School of Health Services. A contact meeting was organized about portfolio preparation. Sample portfolios were examined. Students prepared portfolios on topics they worked on. Students complied interesting news stories, articles, interviews etc. that they thought would make their work in the clinic visible and are relevant with the topic and their learning targets. Every week, they added those compiled items to their portfolios that were in the room of the scholar. At the end of the term, the content of the portfolios were evaluated by the lecturers of the course and two separate meetings were conducted with the students and their opinions were gathered through semi-structured opinion forms.

Content analysis, which is a qualitative analysis technique, is used to analyse students' opinions. In this regard, the following route is taken for data analysis in this study:

i. Coding phase: During this phase, opinions of students were coded and listed one by one.

ii. Categorization phase: The opinions produced by the students were grouped in conceptual categories.

In order to ensure the reliability of the meetings, the two researchers independently and separately read the meeting transcripts and what students had written and formed codes. Categorization titles were determined based on the codes. Titles were compared and finalized. Titles were examined to see whether they answered the questions of this research.

To that end, based on students' opinions, codes are included alongside example student statements to make it easier to understand.

Results

The students gathered the material that will make their task to be visible. These materials such as CV, details of training events, selected pieces of work, logbooks, learning plans, reflective diary/log, reflective commentaries on critical incidents and video recordings of the students' working day. Students wrote a report on each week's activities, which were included in the portfolio and submitted their reports regularly to the lecturers, and received verbal feedback on the reports. They took the responsibility for portfolio's creation, maintenance and appropriateness for purpose. There are some aspects that are recorded in the portfolio like what has happened, what has been done, seen, written, made etc., an identification of where it would be appropriate to go next and an educational action plan identifying ways in which learning needs might be met.

Two meetings were set with the students and semi-structured interviews were conducted. The transcripts of these interviews are coded by the researchers separately and the category titles were formed based on the codes (Add 1).

These titles and code numbers are indicated in the Table1.

Table 1: *Categories of the Transcripts*

Category Title	Code Number
1. Responsibility	1- 27- 35-40-41
2. Being systematic and planned	2- 6- 7-16-20-28
3. Contribution to writing skills	29-34-49
4. Contribution to education-learning	4-17-22-25-30-32-31-39-42-43-44-45-46
5. Reflection	5-8-9-12-19-36-38-47-48
6. Goal setting	10-11-13-21-23
7. Negative feelings	3-15-14-18-24-26-33-37

49 codes were created in this study based on the date collected from the students and these codes are grouped in 7 categories.

Students stated that portfolio program gave them responsibility and helped them improve in that sense. Some of the answers from the students who participated in the research are as follows:

"It made me take responsibility."

"If we didn't have to write a report, I would casually go to the hospital. It gave responsibility."

Students stated that portfolio program encouraged them to be systematic and planned and that thanks to the program, they wrote daily reports and retrospectively thought about what they have done and learned. Some of the answers from the students who participated in the research are as follows:

"It got me to make it a habit of writing regularly."

"It made me plan my day."

"I planned what I would do."

While creating a portfolio, students put down their daily activities on paper. In the reports they wrote, they answered the following questions under "working day in hospital assessment form" they answered question such as "what are the learning goals for that day?", "did learning activity-day plan, learning activities follow the plan?", "what have you learned today (summarize briefly)", "which knowledge and skills did you use today?", "what were your deficiencies?", "what are you planning to do to improve?".

Students expressed the opinion that this practice contributed to their writing skills. Some of the answers from the students who participated in the research are as follows:

"I improved in terms of writing."

"My writing skills have improved while writing a report."

On the one hand portfolio allows the students to express to themselves and their teachers what they have done; on the other hand it has an educational quality. Students get the chance to see what they have learned and haven's learned. In the study, students expressed how portfolio program contributed to their learning with the following sentences:

"Portfolio contributed to my education."

"Writing allowed me to reiterate what I have learned."

"Writing down the process eased my learning."

"Daily writing allowed me to reiterate."

"It allowed me to learn."

"Writing a report for the portfolio refreshed my knowledge."

One of the stages of learning is reflection. Students expressed their opinions on rethinking what they have learned, going back and reiterating what they have learned as follows:

"You and I have seen what I have done in training."

"I thought about what else I could learn."

"It allowed me to notice my deficiencies."

"It led me to rethink what I was doing at the moment."

"I had the opportunity to go back and look what I have done."

Setting learning goals in their reports allowed students to set targets for themselves, thus leading them to structuring their learning process. Some of the answers from the students who participated in the research are as follows:

"I understood what I had to do."

"It allowed me to set goals when coming to the training."

"I questioned the reason for not reaching my goal."

"I tried to reach unreached goals in the following days."

Lastly, students were asked about their negative

feelings toward the portfolio. Answers were as follows:

"Paper is wasted."

"We couldn't convey everything we have done."

"I had a hard time on what to write."

"It was boring to write the same thing every day."

"I had a hard time on writing down what I have done."

Students stated that they found the experience of tutorials to be educational and also they stated that their satisfaction level from the course was high.

Discussion

As a result of this study that examined the opinions of Medical Documentation and Secretariat Program students on the portfolios they prepared throughout 16 weeks for "Training in Clinical Education" course, students have expressed that their success has grown in the process of portfolio preparation, that portfolio preparation is a learning process, that it allows them to benefit from the previous knowledge, that it allows them to think about what they have learned, that portfolio preparation improves their thinking skills, that it improved the sense of responsibility, that it encouraged being systematic and planned, that it assessed performance, that it allowed for seeing weaknesses and strengths and that it increased social interaction. According to this, it can be said that portfolio assessment in higher education contributes to students' personal development. Birgin (2008) emphasized in his study that portfolio program allows students to see their deficiencies, assess their own learning and that it encouraged students to care more about the course and study (8). Similarly, Aydın (2014) stated in his study that portfolio contributes to the students' personal development, that it increases their success, increases the interest in the course and develops the skill to do research from different sources (9).

Traditional measurement and assessment methods are focused on the learning product rather than the learning process and put pressure on students (10). Portfolio assessment method, on the other hand, is a method that encourages students to learn, contributes to their development and prioritises the learning process. Moreover, it allows students to take an active part in the process of assessing themselves.

In our study, weekly reports taken from the students were instantly assessed and students were given feedback. Portfolio contributes to the process with regards to the teacher observing and assessing the student's development and giving feedback. It allows for determining the deficiencies or weaknesses of the student and improving them. This improves the communication between the student and the teacher and by doing so, allows the teacher to know about the student and assess the student more objectively compared to the traditional measurement and assessment tools (11).

As we put forward in our study, using portfolio is more productive and interactive in measuring and assessing the student compared to the traditional methods.

Students' achievements can be assessed by portfolio under this system. Faculty could use the portfolio as an assessment and measurement method in practice.

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Add 1: Transcripts of the students' opinion

1. "It made me take responsibility."

2. "It got me to make it a habit of writing regularly."

3. "Paper is wasted."

4. "Portfolio contributed to my education."

5. "You and I have seen what I have done in training."

6. "It made me plan my day."

7. "It helped me to become regular."

8. "I thought about what else I could learn."

9. "It allowed me to notice my deficiencies."

10. "I understood what I had to do."

11. "It allowed me to set goals when coming to the training."

12. "I questioned the reason for not reaching my goal."

13. "I tried to reach unreached goals in the following days."

14. "We couldn't convey everything we have done."

15. "Writing is boring."

16. "It made me plan my day."

17. "Writing allowed me to reiterate what I have learned."

18. "It was bothering unable to write patient data.

19. "It led me to realise what I have learned and what I haven't."

20. "I planned what I would do."

21. "I set goals."

22. "It allowed me to learn."

23. "It led me to think what I could learn new."

24. "I had hard time for writing different objects every time."

25. "Writing down the process made me stick in my mind."

26. "It was boring to write the same thing every day."

27. "It gave responsibility."

28. "Regularity."

29. "I had a hard time on what to write."

30. "I learned by experience."

31. "Writing down the process eased my learning."

32. "I can compare my knowledge."

33. "I had a hard time on writing down what I have done."

34. "I improved in terms of writing."

35. "I could easily be oblivious to if I hadn't have to write."

36. "It led me to rethink what I was doing at the moment."

37. "I think I am doing the same things."

38. "I had the opportunity to go back and look what I have done."

39. "Writing down the process made me stick in my mind."

40. "If we didn't have to write a report, I would casually go to the hospital. It gave responsibility."

41. "I gave attention the process because I would have write a report."

42. "Daily writing allowed me to reiterate."

43. "Writing down the process made me stick in my mind."

44. "It led me to learn."

45. "Writing a report for the portfolio refreshed my knowledge."

46. "It helped us not to forget our knowledge."

47. "It led me to realise my improvement."

48. "It led me to see what I have done."

49. "My writing skills have improved while writing a report."