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Portfolio-assessment in the Advanced Program of Psychotherapy

Abstract

Problem based learning (PBL) has been the major didactic method employed for the theoretical curriculum in the Psychotherapy program at Karolinska Institutet. How to evaluate the knowledge and skills the students acquire has been an important and yet unresolved question. This question includes the quality of the learning process, i.e. how the students get to "learn how to learn" and how the optimal feedback to the students is provided. The Objective of this project is to introduce a portfolio as an integrated part of the advanced three years Psychotherapy training program.

Aims

For the students; to facilitate the learning process by continuously throughout the program individually collect the documents needed for the portfolio. Moreover, by comparing the portfolio to those of others, the student might discover different learning styles. For the teachers; the portfolio will make it easier to monitor the individual students' learning process, as well as the learning process in the class. Furthermore, learning problems in the program will be identified easier and at an earlier point. To evaluate the outcome of the project and report the findings.

Procedure

To define the core competence needed to conduct psychotherapy. Interviewing representatives of policy makers will attain this, students engaged in the program today, psychotherapists who completed the program some years ago, and teachers from other psychotherapy programs.

To find and evaluate instruments created to assess learning styles. One such instrument is "Inventory of learning styles" (Vermunt J. 1994), a 120 item questionnaire assessing study activities, study motives and study views.

To define and create the different documents needed in the portfolio. This will be done in collaboration with the students.

To evaluate the different documents in the portfolios in collaboration with the students.

Key words

Portfolio evaluation in the Psychotherapy program

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Abstract

Did the introduction and implementation of a portfolio in a psychotherapy curriculum contribute to improved learning? Did it facilitate a description of the students' learning process and function as a basis for examination?

Sixteen students in an advanced psychotherapy program were invited to document their studies with a portfolio. Project data consisted of student interviews, questionnaires and a review of the portfolio documents.

The portfolio was found to be more useful to the students for the theoretical parts of the curriculum. When the portfolio was used as the basis for the exam on theory, 14 students considered it a help in structuring learning, and thought that it contributed to a better integration of knowledge. The portfolio enabled a more comprehensive form of learning to be developed.

Feedback is required in order for the portfolio to be meaningful for the students. The educational advantages must be weighed against the efforts required by the teacher to review the portfolio documentation.

Understanding the learning process plays an increasingly prominent role in education, and developing the way one learns has become a primary objective in itself of learning. To this end it is important to create the prerequisites for students to monitor their learning process.
The main purpose of this project was to examine whether or not the introduction and use of a portfolio can contribute to the development of students' learning processes. The portfolio in this context refers to a student's continuous, systematic and written documentation of efforts, difficulties and progress during his or her education.

The psychotherapy program makes use of different kinds of teaching. Problem-based learning (PBL) has been the major didactic method employed in the theoretical curriculum in the psychotherapy program at Karolinska Institutet since 1994. PBL is directed primarily by the student, who determines what is needed to further his or her education. How to assess the knowledge and skills acquired by the students through PBL has been an important, however unresolved issue. A second aim of this project was to test the use of the portfolio as one possible solution to the assessment problem in PBL.

Because the clinical parts of the curriculum are supervised, they are planned and directed mainly by the teacher. A third aim of this project was to find out what kind of learning is developed in different parts of the psychotherapy program.

Today there are two important trends in educational theory and research: a social constructivistic perspective as to how knowledge is gained, and a shift of emphasis away from what the student learns toward how he or she learns, and away from what is said to what is actually done.

Social constructivism contends that our consciousness is actively formed by our social relationships and interactions and that our ideas about the world are constructions based upon experiences. This perspective affects views on learning. Learning is seen as an active process whereby the student is a co-creator in a social situation that offers response and dialogue. Limits to what the student can learn are determined by language and the social context (Lindström, 1997). Vygotski, a pioneer of social constructivism, has described how a three-year-old talks to him or herself when confronted with a problem. The child uses speech to organize its thought processes, as an external support for thinking, before it is internalized. Thought processes take place automatically and are not conscious (Vygotski, 1978). Portfolio notes, in which the student uses words to describe a thought process, can enable the rediscovery of an "inner dialogue", and can also stimulate further thought (Lindström, 1997). Thoughts are developed when they are transformed by language. With the help of a portfolio, the teacher too can gain insight into the student's thought process. The portfolio becomes "a window of the mind" (Ellmin, Josefsson, 1997, p 17).

In order to understand how learning takes place it is necessary to study how the student thinks and behaves when confronted with a learning task (Entwistle, Percy, 1974; Marton, Hounswell and Entwistle, 2000). Vermund and Verschaffel (2000) proposed process-oriented learning focused on learning-thinking activities. They held that the student would gradually assume control over the learning process, and that education should become more student-directed as the student progressed in his or her curriculum. Lonka and Ahola (1997) have shown that the quality of university education could improve by focusing on the process, rather than exclusively on the product. The use of portfolios made education more process-oriented (Peronne, 1991).

Several authors have described the advantages of using portfolios in the compulsory school system as well as in higher education. They reported that the portfolio contributed to the students' reflection in acting and reflection on acting. The students in these studies became more systematic and had better control over learning than before. Their focus changed from "What did I get" to "How did it go". Emphasis shifted from external forms of control such as exams for example, to the student's own responsibility for learning. Portfolio documentation was kept so that the student had notes to return to and reflect over. The portfolio lead to visibility, clarity, responsibility and awareness. (Kimeldorf, 1994; Lindström, 1997; Taube, 1997; Ellmin, 2003).

Hartman (1995) reported that students confirmed in interviews that the portfolio served to support their memory, helped them to reflect on their own development and to focus on the present objective. It also gave them a better understanding of what they had learned and what they still needed to learn. In a study of nursing students, Stockhausen (2004) found that the combined use of PBL, the portfolio method, and greater self-direction elevated their motivation and broadened their knowledge base.

A study of art students' described how the teacher, with the help of portfolios, obtained a more comprehensive view of learning, i.e. the quality of problem solving as well as of the product. In order to create a more authentic and valid assessment of the students' learning, which included an evaluation of both the product and the process, the portfolio was used as the basis for the exam (Lindström, 1997; 2002; Cole, Ryan, Kick and Mathies, 2000). One shortcoming of these studies has been the difficulty to obtain sufficiently good inter-rater reliability (Paulsson, Paulson and Meyer,1991; Peronne, 1991; Collins, 1992; Taube, 1997; Ellmin, 1998).

1. QUESTIONS

- Was the learning process facilitated by the students' continuous documentation of their learning experiences, and if so, how?
- Was it possible, with the help of the portfolio, to describe the process of learning and to identify learning problems?
- What were the effects of replacing an exam on the theoretical elements with an examination of portfolio notes.

2. METHOD

The project was initiated by defining the goals of the psychotherapy program. To this end, 7 persons from organizations that employ professional psychotherapists and 5 psychotherapy educators representing other psychotherapy programs with different psychodynamic orientations were interviewed. These interviews were used to solicit their views on what a psychotherapist in public healthcare needs in the way of knowledge, skills, and experience. The aim was also discussed among teachers in the program and within a project reference group (see below 3). The defined goals included objectives relative to theory, assessment, therapy, and research and evaluation methods. These were presented orally and in writing during the educational day which prefaced the program.

2.1 The curriculum

There are four parts of the program, two of which are theoretical and two clinical:

- the two theoretical parts consist of theoretical studies, for which PBL is the educational method used throughout, and a degree project. The degree project is not included in this report since it takes place during the third year, and this is a two-year project.
- the two clinical parts include the diagnostic evaluation of patients, with group supervision, and two individual psychotherapies with individual supervision.

The clinical training follows largely the approach to teaching described in *Mästarlära* (*Apprenticeship)* (Nielsen& Kvale, 2000), i.e. personal contact and imitation of and/or identification with the way someone with more professional experience solves problems. Training takes place at Stockholm county Psychotherapy Institute where psychotherapy patients are received. The teachers are also professional psychotherapists at the institute, which enables students to be schooled in a psychotherapy culture.

A recurrent element throughout the entire program is evaluation. At the close of every group meeting for theoretical studies and after every group supervision session, students and teachers reflect on possibilities for and obstacles to learning evidenced during the session.

2.2 Students

The psychotherapy program is an advanced course after a university degree (120 credits/180ECT). In order to be admitted to the program, students are required to have 40 credits/60 ECT in psychotherapeutic methods and worked under supervision as a therapist for two years. The students study for three years on a half-time basis (60 credits/90 ECT) and most of them work as professionals in the healthcare sector.

A class of 12 women and 3 men participated in the project. Their average age was 46 years and the distribution range was 39-52 years of age. The students were previously educated as occupational therapist (1), midwife (1), medical physician (1), priest (1), psychologist (3), physical therapist (1), nurse (1) and social worker (7).

The decision to submit one's portfolio notes was left up to the student, except during the term when the portfolio was the basis for the exam on the theoretical sections. The following documents were submitted to the project: notes on theory course one from 3 students (81%), notes on theory course 3 from 11 students (69%), notes on theory courses 4 and 5 from 16 students (100%), notes on individual supervision from 3 students (18%). Notes from individual supervision are not accounted for in these results since they represent so few students.

2.3 Innovations

2.3.1 Project organization

The project group consisted of the project leader, a college secretary, and two teachers, one of whom was the coordinator for the class that was included in the project. The latter had continuous contact with the students and was the one to whom students turned with problems or comments related to the curriculum.

A reference group was also associated with the project to critically evaluate the work and progress of the project. This group consisted of the project group and 4 former students, one of whom had only recently completed the advanced psychotherapy program.

Views on the project expressed by students who used the portfolio were obtained both from the group of students and individually. The class coordinator held a forum, i.e. regular meetings with the students, every other week during the fall of 2003 and spring of 2004, and every other meeting was devoted to the portfolio project. The project leader also participated in these fora. In the regular program, i.e. without a portfolio project, the class coordinator meets each student once a year to discuss the student's educational situation. These meetings were held once each semester while the project was ongoing. The portfolio was discussed at these meetings and the conversation was documented and filed after approval by the student.

The students' first day in the program consisted of lectures on educational methods and a presentation and discussion of the project. The teachers in the curriculum were invited to the lectures and informed about the project at recurrent teacher meetings.

2.3.2. Documentation

In order to facilitate use of the portfolio, forms with the headings of the different parts of the curriculum were prepared. The forms were also available in digital format. The degree of constraint affected by the headings was discussed within the reference group and the forms were revised several times. The goal was to give the students the freedom to document with a personal touch while offering clarity as to what should be included in the notes. This balance proved to be difficult to achieve. During the first class forum some students said that they wanted to write more freely, i.e. without being confined to the document headings, while other preferred the form chosen by the reference group.

2.3.3. Student support

When the project was originally planned, the student group had not begun the program. The students were informed about the project in conjunction with their acceptance to the program. A recurrent issue in the class fora was that some students experienced the portfolio as an instrument for the project group teachers, i.e. a way to examine the efficacy of education/teaching, rather than a didactic tool for the students.

2.3.4. Feedback

Lindström (1997) found that the teachers' response to the portfolio notes had a decisive influence on students' attitudes toward it. The students who were positive had felt that they were seen and acknowledged in their portfolio work. Ways of providing feedback to students was a regular subject of discussion at reference group meetings. Various forms of feedback were tested: the class fora, a newsletter, a presentation of our analyses of portfolio material to the class, an update on the project prior to the second year, and a discussion of the of the progress of the present report.

Portfolio notes on the theoretical sections were used as an exam during the autumn of 2004. Students turned in their documentation to the examiner, who reviewed the notes and determined whether or not the student had assimilated the knowledge required to pass the current course. There was less skepticism to the portfolio and several students thought that it was more meaningful to work with the portfolio when it served a clear purpose in the curriculum.

2.3.5. Cooperation with the teachers

In accordance with the project plan, even the teachers' views on a student's development were to be documented in the portfolio. After discussion within the reference group, however, it was decided not to include the teachers' notes in order to focus on the student's perception of

his or her learning. The portfolio form included space, however, for the student to document the evaluations that were done with the teacher/supervisor.

2.3.6. Ethics

Permission to study the portfolio material was discussed within the class fora. It was agreed that it was up to the student to decide which material he or she wished to submit, to whom, and whether or not he or she wished to remain anonymous. An exception to this rule was made during the semester when portfolio notes were the basis for examination on the theoretical parts of the curriculum. Ellmin (2003) proposed the same approach, i.e. that the portfolio is personal and that the owner's consent should thus be required in order for someone else to be allowed to study its content.

2.4 Procedure

The following material was analyzed:
- the students' portfolio notes from the first (n=13), third (n=11), fourth (n=16) and fifth (n=16) theoretical course. Each course extended for half a semester. The students formulated learning goals for each of the 5-7 problems included in a course and made a note of the new thoughts and insights associated with each problem. The project group analyzed these notes.
- the students' portfolio notes regarding the group supervision from the first year.
- the parts of the notes regarding individual conversations with the course coordinator.
- the students' estimate of their goal fulfillment was made in individual conversations with the course coordinator during the second and third semester.
- the students' answers to the questionnaire about the pedagogical method applied in the psychotherapy program. The questionnaire was given to all students enrolled in the psychotherapy program, including those who were not in the portfolio project.

A combination of the SOLO taxonomy described by Biggs (2003), and the learning-thinking activities discovered by Vermund and Verschaffel (2000) were used to analyze the portfolio material.
There are five levels in SOLO taxonomy:
- prestructural (misses the point),
- unistructural (simple naming, terminology, focus on one conceptual issue in a complex case)
- multi-structural (a disorganized collection of items, knowledge telling),
- relational (understanding, using concepts that integrate a collection of data, understanding how to apply one's concept to a familiar data set or to a problem),
- extended (relating to existing principle, so that unseen problems can be handled, questioning and going beyond existing principles).

In their studies of students' thinking and learning activities, Vermund and Verschaffel discovered three strategies: in-depth learning (relate, structure, critically examine), gradual strategy (analyze, memorize), and applied strategy (give concrete form, apply).

The SOLO taxonomy was used and the relational level was divided into separate relational theory and relational application levels to account for cognitive in-depth learning and applied strategies. Biggs' multi-structural level is similar to Vermund's and Verschaffel's cognitive "gradual strategy" level. According to Biggs, university studies should mostly affect the relational and extended levels of learning, even though the other levels should exist too, for

example when learning terminology. There was 94 percent agreement between the assessment by two independent raters of 16 responses documented in the portfolio.

Notes from the individual conversations with the course coordinator were analyzed and categorized by the course coordinator.

At the end of the second and third semester, the students assessed how well they thought they had fulfilled the objectives of the program in the three areas: theory, assessment, and treatment. Assessment was rated on a scale of 1 to 10, where 1 stood for no fulfillment and 10 for complete fulfillment.

A questionnaire regarding the pedagogical method applied in the psychotherapy program was distributed to all students in the program. In this questionnaire all students were asked whether or not learning objectives had been formulated for the various parts of the curriculum and if so how useful they considered them to be. The students in the portfolio project were also asked how useful they felt the portfolio was. The usefulness of the portfolio was assessed on scale of 1 to 7, where 1 meant that it had not been meaningful/useful at all/made goal fulfillment more difficult, and 7 meant that it had been highly meaningful/useful.

3. RESULTS

3.1. Students' views on the significance of the portfolio for their learning process

3.1.1. Notes from conversations with the course coordinator.

During the conversation with the course coordinator at the end of the first semester the students (n=16) said that the portfolio had been:

- Helpful as support for their memory (5). Students said that they had returned to the portfolio to obtain answers to the questions: "What has been difficult? What have I learned?"
- Helpful in structuring (2). Example: "…want structure, and so I have something on which I can build my knowledge.
- Helpful in reflecting (2). Example: "…filling in the documents has led me to reflect in a way I don't think I would have, if I hadn't devoted myself to the portfolio."
- Both helpful and a burden (2).
- A source of performance anxiety and stress (4).
- One student discovered, at the end of the first semester, a way of using the portfolio, and believed that the portfolio could be helpful in the future.

In summary, there were 9 students who felt that the portfolio had been useful and one who believed that it would be useful in the future. Two students were ambivalent to the portfolio, and 4 felt that it contributed to stress, rather than proved helpful.

At the end of the second semester, the experienced time pressure characterized conversations about the portfolio.

- Seven students continued to write in the portfolio and regarded it to be useful. Three students wrote occasionally, one wrote only if it was required to submit portfolio notes, and one student "had gotten completely off the track".
- Four students were negative, having experienced the portfolio as an added burden, that it led to stress or that it was difficult to write in because "you are the object of a project."

The students also answered:
- that they look back in the portfolio and can "see that a lot has happened", "…see what I have forgotten, what I've missed." (3)
- that they have had difficulty writing about the clinical parts of the curriculum, that "it became a dead stop". (3)

The second semester 7 students felt that it was useful to write regularly in the portfolio, 3 used it sometimes, one used it if material was to be submitted, and 5 did not use the portfolio.

The third semester the portfolio notes were to be the basis of examination. The students were positive to this (14 of 16 students). They emphasized the importance of receiving individual feedback on the portfolio documents.
- Ten students, two of whom made the discovery by trial and error, related that they had discovered a rhythm in their learning with the help of the portfolio.
- Seven students were of the opinion that their knowledge had deepened and become integrated, and 4 students that the documentation helped to refresh their memory.
- Three students drew attention to the fact that the portfolio corresponded well with PBL and 3 students that the emphasis turned out to be on learning "for life" or "for one's own sake", rather than just to pass the exam.
- One student was not dubious toward the portfolio, but to using it as the basis for the exam.
- One student did not think that the portfolio was personally suitable as a learning tool.

3.1.2 Answers to the questionnaire on the pedagogical method used in the psychotherapy program.
Of the 12 students who answered the questionnaire on pedagogical methods during the second semester, 11 students had used the portfolio, 8 of whom, thought that it had been useful. Usefulness was expressed, for example, as: "opens for an inner dialogue between me and the learning process, and between me and the institution…", "…makes it possible to follow the process while it is in progress", "good to have something to return to". Those who didn't think the portfolio had been useful answered, for example: "… One thing too much. We evaluate so much anyway", "lack of time", "the questions cannot be answered casually… demands reflection and careful consideration."

3. 2. The students' learning process during the Psychotherapy program.
3.2.1. The students' notes from the theoretical part of the program.
The number of notes within respective levels of learning and the percentage of answers above the multi-structural levels are shown in tables tables 1, 2, 3, 4 and 6.

Table 1. The students' learning level according to SOLO as indicated by portfolio notes on the 7 problems in theoretical course 1 and 3.

Course	Pre-struc-tural	Uni-struc-tural	Multi-struc-tural	Rela-tional theory	Relational applying	Extended	Answers above multistuctural level	Total number of answers	n
1	9	3	21	43	9	4	63%	89	13
3	3	8	9	48	4	2	73%	74	11

A greater proportion of answers from students in course 3 (73%) compared to course 1 (63%) concerned relational or extended levels of learning. During course 1 there were relatively more prestructural answers and these answers concerned either how the student was able to

relate to their group or to the PBL method. Two of the answers on the prestructural level from block 3 were concerned only with the use the student had of the study group.

We also wanted to investigate whether or not different problems stimulated to different levels of learning.

Table 2. The students' learning level according to SOLO as indicated by portfolio notes on the problems in theoretical courses 1 and 3.

Course	Prestructural		Unistructural		Multistructural		Relational theory		Relational applying		Extended		Answers above multistuctural level		n	
	1	3	1	3	1	3	1	3	1	3	1	3	1	3	1	3
Problem																
1	3	2	1		4	2	5	7					38%	64%	13	11
2	1		1	2	2	1	8	7			1	1	69%	73%	13	11
3	1			2	6	2	5	6			1	1	46%	64%	13	11
4	1	1	1		2	1	7	9			2		69%	82%	13	11
5	1			1	1	1	11	5		3			85%	80%	13	10
6	1			3	4	0	7	7	1	1			62%	73%	13	11
7	1				2	2		7	8				73%	78%	11	9

Notes concerning the pedagogical method or the study group appeared primarily during the beginning of the first course (prestructural). It was not possible to determine any clear development trend during this course. In both courses, however, there is a greater proportion of answers on a higher learning level for the last, as opposed to the first, PBL-problems presented within the course.

3.2.2. The student notes on group supervision.

Table 3. The students' learning level according to SOLO as indicated by portfolio notes on group supervision during the first year.

Patients	Prestructural	Unistructural	Multistructural	Relational theory	Relational application	Extended	Answers above multistuctural level	n
31	1	2	6	0	21	1	68%	10

Relational application was the most common learning level in group supervision (68% of notes from patient cases). The number of patients for which each student accounted varied from 1 to 7. Three of the 10 students had notes that were categorized only as lower levels of learning (pre-, uni-, multistructural).

3.2.3. Student ratings on the extent of goal fulfillment

Table 4. Student ratings, on a 10-degree (1-10) scale, on the extent to which they fulfilled the objectives of the program.

Semester	Assessment		Therapy		Theory		n
	M	Range	M	Range	M	Range	
2	5.78	4-8	5.81	4-9	6.20	5-9	16
3	6.90	5-8	6.94	5-8	6.31	5-8	16

The second semester the students' average rating of goal fulfillment was >5 on a scale of 0 to 10. Two students rated fulfillment as 4, one for assessment and one for therapy. The third semester students rated a higher degree of fulfillment compared with the previous semester, primarily for the clinical parts. The range of variation was also less the third semester.

3.2.4. Student answers to the questionnaire on the pedagogical method

Table 5. Mean values of the students' assessment on a 7-degree scale (1=not at all, 7=to a very large extent), semester 3.

Question	Project group n=12	Other students n=12
Was the objective of the course meaningfull?	5.85	6.17
Did the learning objectives sufficeas objectives?	6.25	4.50
Your use of the group's learning objectives?	6.41	4.25
Your use of your own learning objectives?	6.41	5.41

For the students in the project group, the learning objectives were considered more comprehensive than for other students. Project group students also had more use of formulated learning objectives than the other students.

3. 3. Portfolio notes as exam

3.3.1 Portfolio notes on the theoretical course during the third semester were also used as the basis of the exam.

Table 6. The students' learning levels as indicated by portfolio notes for theoretical course 4 (5 problems) and 5 (6 problems) when portfolio notes were also used as the basis for the examination.

Course	Pre-struc-tural	Uni-struc-tural	Multi-struc-tural	Relational theory	Relational application	Extended	Answers above multi-stuctural level	Total number of answers	n
4				45	24	11	100 %	80	16
5			16	51	18	11	82%	96	16

When the portfolio was used as the basis for the exam, students' notes were more extensive. A greater number of answers were on at least the relational level and more answers were on the extended level than for previous courses. (Table 6).

Regarding the 5 problems in course 4, 3 students had only a "relational theory" learning level, 5 students had a "relational theory and application" learning level, and 8 students had a "relational theory, application and extended" level of learning.

4. DISCUSSION

The purpose of the project was to investigate whether or not the students used the portfolio, to see if it could facilitate students' learning, to find out whether or not it contributed to a description of the students' learning process, and to determine whether or not it was an appropriate form of examination when the PBL method was applied in the curriculum.

Did the students use the portfolio?

Answers to the questionnaire and the individual conversations with the course coordinator indicated that 11 of 16 students made regular use of the portfolio. In accordance with the chosen work model, students were encouraged to continuously document throughout the curriculum. The students' primary excuse for not using the portfolio was lack of time, despite the fact that they thought that it was a good idea and that it had a meaningful form. If the portfolio is to be included as a part of the curriculum it is necessary to alter priorities so that

teachers have time to provide feedback on the portfolio and students have scheduled time to document. Similar experiences were described by Lindström (1997).

Portfolios were implemented for the biomedical analyst curriculum in Lund. The teachers had three meetings per student each semester in order to review the portfolio. The students thought that they learned more from laboratory work and PBL meetings than from the portfolio discussions (Thomé, Hovenberg, 2003). This can be interpreted to mean that the portfolio was associated with certain educational benefits, though the students felt that other educational forms were more useful.

Fewer students submitted portfolio notes from the clinical parts of the curriculum than from the theoretical. Only 3 students submitted notes from supervision. Since supervision requires a close relationship between the supervisor and the student, it may have been experienced as a breach of privacy, which they wished to preserve. Some students felt that they received the feedback they needed directly from the supervisor in that they continuously evaluated their mutual work. Another reason for not documenting supervision could have been that the suggested intervals between the documentation of the clinical parts were longer than for the theoretical parts. A document each week was presented for the theoretical parts of the curriculum. There was a document per patient for the group supervision, i.e. approximately three per semester for the group and one document per semester for the individual supervision. It might be experienced as less meaningful and more difficult to write a portfolio note on a learning process that has been ongoing for a long time.

Did the portfolio facilitate the students' learning when it was not used for the exam?

Nine out of 16 students during the first semester and 7 out of 16 students during the second semester said that the portfolio had facilitated learning. The advantages described by other authors (Hartman, 1995, Ellmin, 2003) appear in their comments, i.e. that the portfolio helped them to reflect on their own development and to focus on the present objective; that it was a support for their memory and was something to which they could return.

The students in the project group, compared to those who were not in the project group, stated that they had greater use for the learning objectives which they formulated for theoretical studies. This can be interpreted to mean that the portfolio helped the students to both formulate and make more determined use of their learning objectives.

The learning process

By analyzing portfolio notes from the theoretical parts of the program, it was possible to monitor the students' learning process on the group level and note a shift during the course of the curriculum toward higher levels of learning. The students thought that they would learn more about their own learning if they themselves could, at some point during the program, classify their notes in accordance with SOLO taxonomy.

It was also possible to study what levels of learning were associated with individual problems in the PBL curriculum.

Students' assessment of the extent to which the objectives of the program had been fulfilled indicated that they considered fulfillment to be greater during the third semester than during the second semester. The students thought that clearer guidelines would have been necessary in order to ensure that they shared the same understanding of the question used to assess fulfillment.

Students who used the portfolio considered their learning objectives more useful than students who did not use the portfolio. One reason for this could have been that students were inspired by the headings and questions in the portfolio documents to relate their learning to their learning objectives.

Portfolio exam

During the two theoretical courses of the third semester, 14 of 16 students were positive to the fact that portfolio notes were used as the basis of the exam and wanted to continue to be graded this way. They emphasized, for example, that the portfolio helped to structure learning, and to review and to integrate knowledge acquired in the course. These positive effects were the result of having first read relevant literature and made a portfolio note on what they had read before they went to the study group meetings, and adding to their notes after the study group discussion. Notes were handed in to the examiner after rereading and editing them again. Furthermore, notes were reviewed and knowledge was supplemented as examiners delivered feed-back regarding the exam to the students. Some students also pointed out that the portfolio exam corresponded with the didactics of PBL. One student did not think that the portfolio was personally suitable as a learning instrument, and one student was dubious to using the portfolio as the basis for an exam.

A disadvantage of using the portfolio as the form for the exam was that a review of portfolio notes consumed much more of the teachers' time than grading a traditional exam.

Conclusion

The portfolio proved to be a useful instrument, which helped the project group to study the learning process and the students to structure their learning. It was more useful in the theoretical parts of the curriculum, especially when it was used as the basis for the exam. Students received a thorough review. This is in agreement with Lindström's (1997) results where he emphasizes the importance of teachers' feedback on the portfolios so that students feel that they are seen and acknowledged. Since more teacher/supervisor time is required to grade the portfolios compared with more traditional types of exams, more time must be reserved for this task. This means that with current resources, the psychotherapy curriculum would have to be changed. Lindström (1997) has drawn similar conclusions from his studies of the portfolio exam:

"Lack of time for supervision is a general problem within colleges and universities and is one of the factors that makes it difficult to teach and give exams in a way that fosters critical and creative thinking, i.e. activities that are subject to public scrutiny." (p 51).

The form of portfolio documentation and feedback that was tested in the clinical parts of the curriculum did not prove to be useful. According to the students, a prerequisite for the use of the portfolio in the clinical curriculum was that it be developed and followed up in continuous and close cooperation between the student and the supervisor. The development of a portfolio for the clinical curriculum is an important focus for future educational projects.

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