# STUDENTS' REFLECTION ANALYSIS IN PORTFOLIO – BASED LEARNING

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The article presents the results of students' reflection questionnaire which was the evaluation of portfolio-based learning at Mykolas Romeris University used in the course of Legal English. A reflection page as a structural element of a portfolio was implemented in students' assessment of the covered material their feedback and evaluation of learning achievements as well as the methods applied in Legal English classes. The paper also describes the advantages of writing reflection pages and students' attitude towards this kind of method. The conclusion is drawn that writing reflection pages gives students the opportunity to present their point of view to what they are doing, how they are learning and how they would like to learn.

Students find it useful to write comprehensive reflection pages to evaluate their studies. The results of the study show that writing reflection pages in a learning portfolio helps students to register their learning progress and improve their legal English.

Keywords: reflection, portfolio-based learning.

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#### Introduction

Nowadays there are many ways to ascertain students' evaluation of the course, the methods that have been used to develop learners' competencies in order to reach the aims of the study subject syllabus. Whatever method is used, the questions "Why do we use it?" and "What do we evaluate?" are to be answered by both the syllabus designer and the students. Over the last decades, the shift from teacher-centred approach to learner-centred approach at the university has been widely discussed and researched which means that traditional teaching/learning methods have also been reconsidered and replaced by innovative teaching/learning techniques fostering learners' creativity, autonomy and reflection.

Reflection is considered to be an important part of the learning process and there are many

theories about what reflection is and why it is so important especially for learning from experience, developing the skills of professional practice and for the development of metacognitive skills which are said to enhance learning. Reflection, in the sense defined by the Oxford English Dictionary as 'thinking deeply or carefully about, is a term used frequently in everyday language. We usually think it will involve looking back over ideas or experiences, and consider ourselves 'reflecting' rather than just thinking' in situations where the material is complicated and we don't really know what the outcome will be. In the field of reflective practice, reflection is described as a type of "thinking about" which enables a problem solving. It involves the construction of an understanding and reframing of the situation to allow professionals to apply and develop the knowledge and skills of their profession. Reflection is also considered to play an integral role in learning from experience and a number of researchers have developed learning cycles where the learners have a 'learning experience and then reflect on this'. Kolb (1984: 18) for example suggests that the reflection allows the learners to form abstract concepts from their experience in order to guide active experimentation and further learning experiences. It is said that reflection helps to turn the experience into learning. R. Bubnys (2007: 2) states that reflection is important and valuable both at the beginning of accumulation of experience and later, while systematising obtained information and analysing feelings and experiences that arouse during learning. Reconstruction of experience is a central and continuous, overall aim. If the learners want to achieve this aim, they have to reflect while analysing their values, attitudes, emotions which, in their turn, transform understanding and provide a new sense to ideas. while relating them with previous knowledge and obtained information. There could be many practices and methods to implement reflection in teaching/learning process: project- based learning/teaching, case study, problem based learning/teaching, portfolio - based learning/ teaching and etc. The object of our research is students' reflection in portfolio- based learning. Having chosen this object, the aim of the research is to analyse students' reflection as feedback and evaluation of learning in the course of Legal English. The methods of the research include the analysis of methodological references, a quantitative research, statistical data analysis (SPSS statistical package for social sciences). The paper explores **the problem** of the students' attitude towards writing reflection pages in a learning portfolio in order to give feedback and evaluation of their studies. Therefore, the main hypotheses of this articleare: 1) students find it useful to write comprehensive reflection pages to evaluate their studies; 2) writing reflection pages in a learning portfolio helps students to register their learning progress.

### Reflection in a new learning environment

Over the last decades the learning environment at the university has considerably changed. The changes were caused by the implementation of new educational theories which were followed by continuous introduction of new processes in teaching and learning as well as adoption of lifelong learning strategies. N. Burksaitiene (Burkšaitienė, Teresevičienė 2008: 155–166) names one more important reason for this shift which is the rise of new attitudes towards learning at the tertiary level, i.e. learning through understanding, critical thinking and reflection or so called deep learning as opposed to surface learning. Portfolio -based learning is one of the methods which has been widely used by many tertiary level teachers to serve both encouraging feedback through reflection pages as well as helping students to register their learning progress. Portfolio- based learning is considered to be an effective tool for enabling students to gain insights into the dynamics of their knowledge and competence growth in an area or some areas over time, providing various opportunities for feedback, developing reflective practices that enable him or her to project their own learning towards a required academic level or standard, allowing students to attempt more sophisticated and challenging assignments (cit. in Burkšaitienė, Teresevičienė 2008: 155-166).

While analysing issues of teaching and learning, attention is paid to the fact that the learners are little oriented towards gaining such abilities which would allow them to achieve, select and assess knowledge and abilities and to independently use knowledge and skills gained (Baranauskiene 2000: 60–67, 2002: 16–48; Jarvis *et al.* 2004: 22–36; Ramsden 2000: 2–18; Zuzeviciute 2005: 35–68; Zydziunaite 2001: 25–52, cit. in Bubnys 2007: 1–4).

Reflective thinking is central to student's self-evaluation. In his book, Experience and Education, John Dewey (Dewey 1910: 9–12) describes reflective thinking as the necessary step that must come between impulse and action if intended purposes are to be achieved. Here

we look more closely at the process of working with others (or ourselves) to deepen learning. In particular, we explore emancipating and enlarging experience. Experience entails thought. It includes reflection. In order to emancipate and enlarge experience, we must attend to both having and knowing the nature of reflection – here we look at remembering, attending to our feelings, and building new understandings. This is a process central to our work – learning from experience according to a famous circle of experiential learning according to Kolb (1984: 21) (see Fig. 1).

In the pedagogical process different kinds of experiences (life experience, socio-cultural experience, and linguistic experience) are often missed and not taken into account. At the same time we can admit that quite many teaching situations avoid paying much attention to feelings learners have in the process of learning. For these reasons, the whole system should be observed, analyzed and taken for granted. Four main categories – steps are discussed in the circle of experiential learning: concrete experience; observation and reflection; forming abstract concepts; testing in new situations.

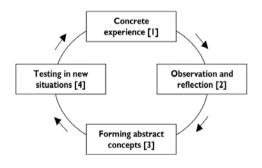


Fig. 1. Experiential learning (after Lewin and Kolb)

Categorizing critical thinking by common features at least two general views can be presented: (1) intentional use of higher order thinking skills and (2) metacognition. Angelo (1995: 6) concluded, "Most formal definitions characterize critical thinking as the intentional

application of rational, higher order thinking skills, such as analysis, synthesis, problem recognition and problem solving, inference, and evaluation". Others take the position that critical thinking is metacognition, awareness of one's own thinking. To do this, Beyer (1995: 2-8) says that the thinker must have the following skills: critical thinkers are skeptical, open-minded, value fair-mindedness, respect evidence and reasoning, respect clarity and precision, look at different points of view, and change positions when reason leads them to do so. To think critically, some criteria or some standards must be applied. Critical thinking involves identifying, evaluating, and constructing arguments. Critical thinkers view phenomena from many different points of view. It should be said that critical thinking uses many procedures, such as asking questions, making judgments, and identifying assumptions. These procedures are needed in the application of new teaching/ learning methods fostering reflection.

There are some learners who reflect only when there is an incentive to do it or when guidance or conditions in their environment are conducive to reflecting. What are the main reasons for writing refection pages? There could be as many answers as tasks. In terms of purposes for reflection, a perusal of the literature might suggest that every time a learner chooses to write or is asked to write a reflection page or a learning journal, a different purpose for the process is given. In a review of over a hundred papers on journal writing Moon (1999: 10-36) found around eighteen purposes for journal writing. It is important to note that most journals, reflection pages will fulfil more than one purpose, and that the purposes set by a tutor are not necessarily the same as those that will be fulfilled or perceived by a student. Students learn because writing a reflection page in a portfolio or a journal is a process that accentuates favourable conditions for learning: 1) it produces intellectual space in which they can think; 2) it also encourages independent learning - learners have to write their own journal and they can monitor the process and do it at their own pace; 3) writing a reflection page in a portfolio or a journal also provides a focusing point, an opportunity to gather thoughts and to see the whole system of the gathered information; 4) learning from a portfolio or a journal enhances learning skills because it forces the learner to cope with piles of information or material (Sliogeriene 2005: 199–207).

There are a lot of techniques used to describe the implementation of learning journals or portfolios to facilitate reflection. There could be different purposes of using reflection, including ideas such as:

- to record experience;
- to develop learning in ways that enhances other learning;
- to deepen the quality of learning, in the form of critical thinking or developing a questioning attitude;
- to enable the learners to understand their own learning process;
- to facilitate learning from experience;
- to increase active involvement in learning and personal ownership of learning;
- to increase the ability to reflect and improve the quality of learning;
- to enhance problem-solving skills;
- as a means of assessment in formal education;
- to enhance professional practice or the professional self in practice;
- to explore the self, personal constructs of meaning and one's view of the world;
- to enhance the personal valuing of the self towards self-empowerment as a means of slowing down learning, taking more thorough account of a situation(s);
- to enhance creativity by making better use of intuitive understanding;
- to provide an alternative 'voice' for those not good at expressing themselves;
- to foster reflective and creative interaction in a group.

Usually reflective journaling (Peery 2005: 101) or reflection pages in a portfolio are used for the purpose of the improvement of learning which is often considered a formative assess-

ment. In some cases portfolio is used as for a summative assessment in order to assess students' made progress. Portfolio could be a register of the subject knowledge as a file compiled by an individual for the particular subject but it could have the form of registering the experience, knowledge and assessment of all subjects, if this form is acknowledged at an institution. On the other hand, portfolio as self-reports could include all the forms of progress registers: learning journals, logs, learning contracts and reflective diaries. Writing reflection pages in a portfolio stimulates critical thinking and helps students clarify ideas through discussion and debate. The level of discussion and debate within groups of three or more and between pairs is substantially greater than when an entire class participates in a teacher led discussion. Students receive immediate feedback or questions about their ideas and formulate responses without having to wait for long intervals to participate in the discussion. This aspect of collaborative learning does not preclude whole class discussion. In fact whole class discussion is enhanced by having students think out and discuss ideas thoroughly before the entire class discusses an idea or concept. The level of discussion becomes much more sophisticated.

Entries in a portfolio can be made on a regular basis and the length of an entry doesn't mean the significance or quality. There could be various questions that help you to start a portfolio and reflect on your learning process or the progress that has been made.

#### Research findings

The results of the Students reflection questionnaire provided to learners were analysed after the completion of the Legal English course. The questionnaire was divided into two sections: the evaluation of project based learning and the feedback on the usage of reflection pages in portfolio - based learning. The main focus in this article was the analysis of the second part of the questionnaire, concentrating on the questions related to reflection. Distribution frequencies analysis was used to measure the students' attitude towards the implementation of portfolio-based method in their studies; the usefulness of the reflection pages and effectiveness and usefulness of writing portfolio in order to register their own progress. The findings showed that the students' attitude towards portfolio - based learning was highly positive. The following responses show that 84% of students strongly disagreed or disagreed that they would learn better when the teacher explained the concepts in class, 68% of the respondents agreed and 16% of them somewhat agreed that the portfolio will be useful for their future studies. Data also revealed the students' positive evaluation of portfolio - based learning as it helped them to revise and memorise legal English vocabulary. More than half of the respondents agreed with the statement "Doing various exercises in the portfolio helped me to revise legal English vocabulary". The variable of the usefulness of reflection pages in learning a foreign language was measured from the point of view of the portfolio- based learning/teaching. It was interesting to notice that only 5% of respondents disagreed with the statement "I found the reflection pages useful" while 42% strongly agreed and 27% of students found the reflection pages useful in their studies (Fig. 2). Students self-assess their learning progress and write the reflection pages identifying their strengths, weaknesses and needs. Self-assessments ask students to create an active relationship with course material. Students may discover what they have learned, develop questions for further study, identify learning needs, and more actively direct their education.

Students' feedback integrates learning — we hope students will carry what they learn into their lives. The act of reflecting on one's learning, looking back on it and describing it to another person, embeds it more deeply in memory. Filling in the learning portfolio helps students to gather all the information, the course material, the written assignments, tests corrected by the teacher in one place and

see whether they are making any progress, self-evaluate and project their future studies. The variable "Participating in this activity helped me to register my learning progress" was measured. It is interesting to note that 35% of respondents strongly agreed and 28% agreed that using the learning portfolio helped students to register their learning progress (Fig. 3). Only 6% of the respondents strongly disagreed and 7% disagreed with the statement.

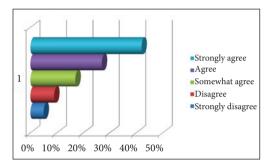
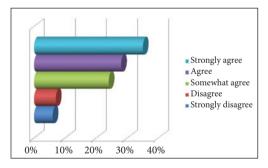


Fig. 2. The usefulness of reflection pages



**Fig. 3.** The influence of portfolio – based learning on learning progress

Students' self-evaluations give the possibility to look at their studies deeper; learners don't collect the data at random. When students explore the meaning of what they have learned, they often discover its usefulness, especially if the learning portfolio is structured; learners follow the structure, have all the information in separate files but at the same time all learning material is in one place. Though there are some students who prefer writing everything in

their notebooks (Fig. 4). 5% of the respondents strongly agreed and 12% agreed that they would prefer writing everything in their notebook.

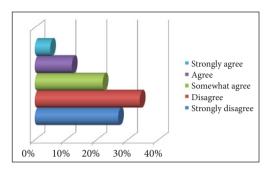


Fig. 4. Students' preference for notebooks

Correlational statistics for the variables are given in Table 1. Correlational statistics for the usefulness of reflection pages and the usefulness of portfolio to register the students' progress revealed that the Pearson coefficient was high:  $r = 0.628^{**}$ , p = 0.000.

Respondents' view to the usefulness of reflection was positive. The usefulness of this kind of activity varies among the males and females and the revealed difference is statistically significant. F (5, 1247) = 9.843; p < 0.001. The applica-

tion of the Bonferroni criterion in Post Hoc test tabulated the gender the results of which lead to the conclusion that the female respondents are more willing to write reflection pages in a portfolio than males. Female respondents (61.9 %) were more positive than male respondents, i.e. they expressed a higher degree of willingness to write reflection pages in the portfolio than male respondents even though the number of male respondents dissatisfied with the overload brought by filling in the portfolio was smaller than that of female (56.6 %) respondents F (5, 1247) = 22,664; p < 0.001. Respondents who acknowledged that filling in the portfolio was useful to improve their legal English were more positive expressing their attitude towards writing reflection pages; therefore, they expressed a higher level of willingness to fill in a language learning portfolio. A conclusion can be drawn that the females are more diligent and find it more useful to write reflection pages in a language learning portfolio than men.

The statistical significance of filling in the language learning portfolio in order to register learning progress was counted using the analysis of variance ANOVA. ANOVA revealed statistically significant difference between the gender groups F (5, 1247) = 3,574; p < 0.005.

<b>Table 1.</b> <i>Correlational subordination</i>	of us	efulness and	l efficienc	y of po	rtfolio-	based learning
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	Reflection pages	Portfolio for registering	Portfolio for legal English	Portfolio for future studies	Portfolio for legal English vocabulary
Reflection pages	1,000				
Portfolio for registering	,628**	1,000			
Portfolio for legal English	,535**	,422**	1,000		
Portfolio for future studies	,398**	,761**	,610**	1,000	
Portfolio for legal English vocabulary	,162*	,116	,375**	,488**	1,000

<sup>\*\*</sup> correlation is significant at 0,01 level

<sup>\*</sup> correlation is significant at 0,05 level

Pearson correlation coefficient revealed a significant correlation between two variables "participating in this activity helped me to register my learning progress" and "I think the portfolio will be useful for my future studies" (r = 0.76; p < 0.01), as well as "filling in the portfolio was useful to improve my legal English" and "I think the portfolio will be useful for my future studies" (r = 0.61; p < 0.01). It could be assumed that the respondents found the portfolio - based method useful and efficient in registering their learning progress.

#### Conclusions and discussion

The results of the study indicate that the language learning portfolio implemented in legal English classes was positively evaluated by learners and acknowledged that learning English for Specific Purposes in such an environment was effective. The respondents found the portfolio - based method useful and efficient in registering their learning progress. The findings of the investigation clearly showed that the females being more diligent found it more useful to write reflection pages in a language learning portfolio than men. When students explore the meaning of what they have learned, they often discover its usefulness, especially if the learning portfolio is structured; learners follow the structure, have all the information in separate files but everything in one place. The language learning portfolio used in the course was structured to help students register their learning progress.

The major findings of correlational statistics revealed that the implementation of project based learning was successful. Having analysed the results of the questionnaire "Students Reflection Questionnaire", the following conclusions can be drawn: 1) students find it useful to write comprehensive reflection pages to evaluate their studies; 2) writing reflection pages in a learning portfolio helps students to register their learning progress; 3) when students explore the meaning of what they have learned,

they often discover its relevance—how ideas apply to real life or explanations for their own experiences.

Students self-assess their learning progress and write the reflection pages identifying their strengths, weaknesses and needs. While writing reflection pages students express their attitude towards the material studied, the methods used in the learning/teaching process. Learners discover what they have learned, develop questions for further study, identify learning needs, and self –project their further education.

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# STUDENTŲ REFLEKSIJOS ANALIZĖ MOKANTIS APLANKO METODU

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Straipsnyje nagrinėjamas mokymosi aplanko metodo struktūrinio elemento – refleksijos puslapių taikymo efektyvumas mokymosi procese. Refleksijos analizė atlikta panaudojus anketinį tyrimą, kurį sudarė dvi dalys: projekto metodo taikymo grįžtamojo ryšio analizė ir aplanko metodo taikymo analizė. Kaip parodė tyrimo rezultatai, studentams nebuvo lengva rašyti refleksijos puslapius, bet respondentai pažymėjo, jog tai buvo labai naudinga, nes refleksija leido jiems patiems suprasti, kas jiems sunkiausiai sekėsi, kokie išlieka trūkumai, kokie yra jų poreikiai ir kaip jie norėtų projektuoti tolesnę savo veiklą. Atliktas tyrimas leidžia teigti, kad studentų mokymosi pažanga turėtų būti fiksuojama, registruojama ir vienas iš efektyviausių būdų, skatinančių studentus vesti mokymosi rezultatų registrą, yra mokymosi aplanko metodo taikymas studijoms. Respondentų atsakymai rodo, kad naujo metodo, tokio kaip aplanko metodas, naudojimas svetimosios kalbos studijų kontekste skatina studentus registruoti daromą pažangą ir ugdo saviprojekcijos kompetenciją, kas suteikia studentams galimybę pradėti planuoti savo tolesnę veiklą ne tik aukštojoje mokykloje, bet ir darbo rinkoje.

Reikšminiai žodžiai: refleksija, mokymosi aplanko metodas.

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