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School Librarians’ Attitudes towards Teaching Information Literacy

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Abstract. The objective of the research is to outline school librarians’ attitudes towards teaching information literacy by analysing teaching experience, a scope of courses taught, and attitudes towards motivation of teaching. Respondents of the survey were librarians from secondary schools in Lithuania and Poland. Respondents for the research were selected from top 250 best secondary schools in Lithuania and Poland accordingly. Data for this study was gathered using Computer-assisted web Interviewing (CAWI) technique. The results of the survey showed that school librarians had more positive emotions about their teaching motivation than negative ones. We saw that school librarians concentrate more on finding information, but are less actively involved in developing skills on the use of the information found. Also, school librarians are more prone to speak about information sources and specific tools to find it rather than organising their teaching activities as a platform for building up learning experiences. For better insight, the analysis was carried out comparing results from Lithuania and Poland as well as linking emotions with job meaningfulness.

Keywords: School librarian, the Big6, information literacy, motivation for teaching.

1 Introduction

Margaret Mead once said, “Children must be taught how to think, not what to think.” This great statement explains the importance and the necessity of information literacy (IL). Nowadays children are from early days surrounded by an overload of information, and information literacy education gives them the tools not only to become full-fledged members of the global network but also to create it. The digital natives’ generation needs good IL teachers from the beginnings of an education. For many reasons, those duties may be performed by school librarians [1-11]. Librarians organisations support this solution. The American Association of School Librarians describes the school librarians’ duties as “working with members of the school community to develop the policies, practices, and curricula to guide student learning” [11, p. 17].

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School librarians could potentially play a major role in infusing information literacy concepts and skills into secondary school curricula as well as enhance implementation of information literacy knowledge practices and dispositions into secondary school education system. There is no knowledge about teaching experience of school librarians in Lithuania and Poland, about information literacy course content (if available at all) and no overall evaluation of librarians' attitudes to teaching information literacy (being a librarian as an educator). Evidence suggests that emotions experienced by librarians during their educational duties may be included among the most important factors for improving their teaching proficiency [10]. It suggests a need to evaluate school librarians' attitudes towards teaching, their experience in implementing information literacy, their potential to be ambassadors of information literacy at schools as well as ability to prepare secondary school students to be consumers and creators of information who can participate successfully in collaborative spaces.

The present study objective is to find out what are school librarians' attitudes towards teaching information literacy. Although there are the studies which concern the librarians' emotions related to professional tasks [10, 12, 13], on the other hand, the affective dimensions of instructional work of school librarians need more detailed investigations. Emotions influence the efficiency and efficacy of teaching significantly, so we decided to conduct the research among school librarians in Lithuania and Poland to get knowledge of their feelings related to performed teaching, as well as job meaningfulness evaluation. Due to the lack above of IL teaching standards which are officially recognised (both countries do not have official recommendation which IL standard to use), the diversity of the courses is considerable. That is why we also examined how the school librarians teaching activities looks like, using the Big6 model as a universal framework to assess taught content. The goal of this research was to recognise the IL situation from the school librarians' perspective and to understand better school librarians' attitudes towards developing information literacy skills at schools. Poland and Lithuania were chosen as countries that started implementing information literacy activities almost at the same time and conditions (shortly after the collapse of communists' regimes and the Soviet Union at the end of the nineties). The cultural and social as well as the economic context is similar as well.

2 Theoretical Background

2.1 School Librarians as Teachers

A considerable amount of literature has been published on analysing the role of school librarians [i.e. 1-9]. For a long time, this role has been perceived only as “keeper of the books” [1]. Today, school librarians are not only managers of school libraries but, according to the American Association of School Librarians (AASL), are also playing different roles such as information specialist, teacher, instructional partner, program administrator [11]. Those duties are constantly changing; ICT development can be distinguished as a key factor of these changes [1]. The research conducted by Wine allowed her to discuss the radical change in the role of school librarians and to conclude

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that their skills and competencies predispose them to fulfil leadership roles in technology integration into classroom instruction [1]. Asselin made the similar conclusions [14].

We would like to focus on the role of the school librarians as the teachers throughout this paper. The responsibility and importance of this task are clear when we refer to the guidelines of the AASL, where the duties of school librarians are described as empowering students to be: “critical thinkers, enthusiastic readers, skilful researchers, and ethical users of information” [11, p. 8]. Although the previous studies reveal the significance of this job, it does not correlate with the level of support they receive at school. As Ash-Argyle and Shoham stated: “Despite their potential role as lead educators of IL skills in the school community, school librarians tend to be invisible to students, teachers and headteacher” [8, p. 119]. According to the literature reviewed by Lo and Chiu [3] the problems school librarians are faced with are similar in many countries: a lack of resources, time, certified programs and training opportunities, recognition toward school librarians’ qualifications, as well as the fact that many teachers and administrators still do not understand the concept of IL and are not aware of the role which school librarians can play in this process. Another important issue is the school librarians’ perception of their readiness in implementing IL education. Several researchers have found that school librarians perceive themselves as having a low level of IL skills [5, 15, 16], there are also studies which prove the necessity to improve the degree of those skills [16-18].

2.2 Teaching Librarians Emotions

Professional literature reveals that the level of job satisfaction of school librarians is in many cases low [3, 8, 19-21]. The studies above provide grounds for a statement about potential difficulty with affective dimension of teaching activity. Thus, in this paper, we will pay particular attention to the emotions as factors for school librarians’ professional identity. According to Gargante, Meneses and Monereo the emotion related to the teaching should be understood as “specific set of teachers’ knowledge on the affective dimension of their teaching” [22, p. 163]. The significance of the emotions as the factor influencing the process of instruction was highlighted by a study of Beauchamp and Thomas who indicated how strongly the emotions might affect teachers’ attitude, culture and discipline [23]. There are also studies which focus particularly on the emotions of librarians during instructional work [6, 10, 24-26]. The researchers have noticed that the teacher-librarians emotion differ depending on their approaches to teaching [6], but also organisational factors, self-conception, intrapersonal factors and teaching agenda [10, 26]. The investigation conducted by Julien and Genuis show that considering emotions of librarians as educators may influence significantly their job performance, as well as a library as an organisation [10, 26]. Grigas, Fedosejevaitė and Mierzecka’s examined emotions related to different aspects of academic librarians’ teaching. They found out that the most positive evaluations were given to consistency and positive attitude toward teaching while the most pessimistic evaluations were given to effort that teaching requires and feeling of tenseness during the teaching process [27]. Another important issue connected with the emotions is a feeling of performed job meaningfulness. The

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feeling of meaningfulness is crucial to work engagement and motivation [28]. Lo and Chiu’s study confirms that school librarians’ dedication and belief in positive results of their work influence essentially an overall learning procedure [3, p. 8].

2.3 Information Literacy Programs at Schools

Considering the nature of school librarians’ work we should notice that unlike other teachers there is no widely accepted syllabus or standards that school librarians may base on. It causes huge diversity in information literacy instructional programs. Throughout this paper, we would like to examine affective dimension of different aspects of teaching process; this is the reason why we need the framework to compare also the differences between instructional work done by our respondents, as this may influence the emotions as well. The few models which may be used by school librarians to support their teaching efforts, i.e. the Big6, REACTs, Pathway to Knowledge, FLIP IT, and I-Search [29, 30, p. 33-76, 91-126]. We have decided that Big6 model will be the most useful for our purposes. The Big6, developed by Eisenberg and Berkowitz [31] defines information problem-solving regarding a research process and as teaching approach is widely used all over the world, from kindergarten through higher education [32- 34]. The unique character of this model result from its construction: it comprises a unified set of information skills which taken together form a process useful whenever people are faced with an information problem or with making a decision that is based on the information. The Big6 involves the following six stages [35], which are outlined in table 1 at section 4.2.

The study by Wolf, Brush and Saye, metacognition research on task performance by eighth-grade students, proves the usefulness of the Big6 as the framework for scientific research [32]. In our study, it gives a clear framework to reach the knowledge about the content of teaching program performed by librarians in different schools.

3 Method

3.1 Data Collection and Participants

The study was conducted in the form of a survey using Computer-assisted web Interviewing (CAWI), with data being gathered via an online survey tool 1KA.SI, the open source software that allows a use of the semantic differential technique which is a type of a rating scale designed to measure the connotative meaning of attitude towards teaching.

Data collection started on 6th of March 2017 and came to an end on 31st of March 2017. Respondents of the survey were librarians from secondary schools in Lithuania and Poland. Respondents for the research were selected from top 250 best secondary schools in Lithuania and Poland accordingly (we have used official school ranking lists in Lithuania and Poland). Invitations to take part in the survey were sent to 500 schools. By the end of the survey period, data was gathered from 230 librarians (143 from Lithuania

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(LT) and 87 from Poland (PL)) – response rate was 46%. Data was collected following confidentiality procedures.

Teaching experience of the participants: less than 5 years (LT – 19%; PL – 8%); between 5 and 10 years (LT – 33%; PL – 12%); between 11 and 15 years (LT – 19%; PL – 17%); between 16 and 20 years (LT – 14%; PL – 8%); more than 20 years (LT – 15%; PL – 55%).

Type of lectures librarians implements in Lithuania and Poland: Several hours long mandatory Information Literacy courses integrated into curricula (LT – 4.4%; PL – 20.7%); Several hours long optional Information Literacy courses are not included in curricula and students can choose the course freely (LT – 16.2%; PL – 8.6%); Individual consultations to individual students or to group when is a need to solve particular information seeking issues (LT – 47.1%; PL – 32.8%).

3.2 Measures

A questionnaire has four parts. In the first part are two questions: what type of information literacy lectures do they implement and how long do they implement information literacy teaching activities.

In the second part there are 12 items on what information literacy skills do they develop during teaching activities at a school library in the first part. Each item was evaluated through the four-point Likert scale: 1 – never; 2 – seldom; 3 – sometimes; 4 – often. The design of this part was based on the Big6 a six-stage model.

In the third part there are five pairs of adjectives dedicated to evaluate motivation for teaching. Teaching librarians' emotions were evaluated through a seven-point rating Likert scale. Semantic differential scores were transformed to fit in a scale ranging from -3 to +3 and a middle or neutral point in a zero (0). The design of this part was built on research conducted by counterparts in Spain who analysed affective dimensions of university professors about their teaching by exploring it through the semantic differential technique [22].

In the fourth part respondents were asked to fill in the work meaningfulness [36]. Each item was evaluated through the seven-point Likert scale: 1 – Strongly disagree, 2 – Disagree, 3 – Slightly disagree, 4 – Neutral, 5 – Slightly agree, 6 – Agree, 7 – Strongly agree.

This research seeks to address the following questions: 1. What are school librarians' attitudes towards teaching information literacy? 2. How have the attitudes been affected by country, experience, and type of lectures? 3. How work meaningfulness evaluation correlates with teaching emotions and developing information literacy skills?

3.4. Analytical Approach

We compared the average scores (averages and standard deviation (STD.)) of information literacy skills development and adjectives to find the most positively valued pairs of adjectives and most often developed skills. We explored the Pearson correlation between the school librarians' activities on developing information literacy skills and motivation for teaching. We analysed the differences in the means of each of the Big6

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model stage, motivation for teaching and job meaningfulness scale by applying independent samples T-test. We used multiple regression analysis to link motivation for teaching with job meaningfulness. Internal reliability was evaluated by Cronbach's alpha and criterion validity.

4 Findings

The high reliability of the questionnaire (Cronbach's alpha 0.849) and excellent reliability for the second, third and fourth parts of the questionnaire (Cronbach's alpha ranging from 0.914 to 0.933) let us analyse findings of this study with confidence.

4.1 General Results

At first, let us look at the general evaluation of how often do librarians develop information literacy skills during teaching activities at a school library.

The difference between the highest and the lowest mean was 0.98 (LT) (Std. 0.82) and 1.06 (PL) (Std. 0.74). Highest results are seen in information locate and access (5th and 6th skill), information seeking strategies (3rd and 4th skill) and task definition (1st and 2nd skill). Almost all, except 1st and 8th item, were statistically significantly different ($p < 0.005$). Lithuania showed a lower mean in almost all items in comparison with Poland.

The single most noticeable observation to emerge from the data comparison was that school librarians from Lithuania otherwise than counterparts from Poland are less likely to develop skills required to work with information sources founded. Also, it should be noted, that the standard deviation between the results in all items is quite high (around 0.8).

School librarians in both countries have a very positive motivation for teaching (average): Feelings regarding your attitude towards teaching (Positive - negative) (LT – 5.22; PL – 6.09); Significance of teaching to you personally (Irrelevant – relevant) (LT – 5.4; PL – 6.18); Your attitude to your future improvement as a teacher (Pessimistic - optimistic) (LT – 5.32; PL – 6.12); While teaching you feel (Tense - calm) (LT – 4.6; PL – 5.71); Feelings that you have about teaching (Intrusive - pleasant) (LT – 4.94; PL – 5.69).

Highest difference between Poland and Lithuania is in assessing feeling while teaching (mean difference 1.11). Lithuania school librarians seemed to be tensed up more while teaching than colleagues from Poland and evaluated it lowest (mean 4.6) of all five items. All the elements are statistically significantly different ($p < 0.005$).

No insights can be made from the correlation analysis (no strong correlation) of information skills and motivation for teaching.

What is interesting in this data is that motivation for teaching is related to what types of information literacy lectures are implemented. In Lithuania case, the highest evaluation of items of motivation for teaching was found when respondents implemented several hours long optional information literacy course which is not included in curricula and students can choose the course freely. In Poland case, it is so only with the significance of

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teaching personally and feelings regarding attitudes towards teaching. However, feelings that they have about teaching while teaching and their attitudes to future improvement as a teacher was evaluated highest so school librarians who had several hours long mandatory Information Literacy course integrated into curricula.

We made a multiple regression analysis to link teaching of information literacy skills with job meaningfulness. Our analysis showed no statistically significant relation.

School librarians think that their work is important and they have a meaningful job (average_: The work that I do is important (LT – 6; PL – 6.2); I have a meaningful job LT – 6; PL – 6 .1); The work that I do makes the world a better place (LT – 5.7; PL – 5.8); What I do at work makes a difference in the world (LT – 5.3; PL – 5.5); The work that I do is meaningful (LT – 5.9; PL – 5.8).

By contrast school librarians a bit less positively reflect on their personal contribution in embracing or making the world a better place, and less likely are confident in the ability to make a difference in the world.

4.2 Analysis of information literacy skills development

For a better understanding of the results, a deeper look into every item is needed. To see the differences between Lithuania and Poland and compare them all, we converted the results to a percentage equivalent. We decided to measure what percent of the highest evaluation criteria (sometimes and often) were chosen. We think it helped us to clarify which of the information skills are developed most often.

Table 1. Percent of sometimes (3) and often (4) evaluation criteria were chosen in Lithuania and Poland sample and differences between countries

<i>Information literacy skills</i>	<i>Percent of 3 and 4</i>		<i>Difference between countries (p)</i>
	LT	PL	
1. Define the information problem	81%	83%	0.198
2. Identify their information needed (to solve the information problem)	71%	92%	0.000**
3. Determine all possible sources relevant to problem	69%	90%	0.000**
4. Select the best sources	85%	96%	0.001**
5. Locate sources	90%	97%	0.000**
6. Find information within sources	87%	96%	0.003**
7. Engage (e.g., read, hear, view, acquaint themselves with information)	65%	86%	0.000**
8. Extract relevant information	81%	91%	0.013
9. Organize from multiple sources	52%	79%	0.000**
10. Present the information	54%	64%	0.001**
11. Judge all above-mentioned action`s effectiveness (does a problem was solved)	53%	62%	0.002**
12. Judge all above-mentioned actions efficiency (whether it was possible better)	47%	57%	0.002**
Average overall	70	83	
Average by Big6 steps:			

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1. Task definition (1 st and 2 nd skills)	76%	88%
2. Information seeking strategies (3 rd and 4 th)	77%	93%
3. Location and access (5 th and 6 th)	89%	97%
4. Use of information (7 th and 8 th)	73%	89%
5. Synthesis (9 th and 10 th)	53%	72%
6. Evaluation (11 and 12)	50%	60%

**p<0.005

School librarians from Poland showed a deeper involvement in teaching information literacy skills in an average of 13%. The signalling items are 3, 4, 8, and 9, which differ for more than 20% each. All of them are related to the requirement of higher order skills to deal with.

None item in Lithuania case reached more than 90% when in Poland case we have even six highly evaluated cases such as number 2, 3, 4, 5, 6, and 8. It shows that school librarians in Poland give much attention to information seeking strategies, an information location and access and use of information.

Synthesis and Evaluation steps were evaluated least – on average 62% and 55%. It shows that far too little attention is being paid to a result of the whole process – organisation of information sources, presentation of the information, judgement of whether a problem was solved and whether it was possible to do better. Two discrete reasons emerged from this. One is that type of information literacy lectures implemented has a direct impact on how often Synthesis and Evaluation steps were evaluated more positively. Those who implement several hours long mandatory Information Literacy courses integrated into curricula more often develops skills outlined in Synthesis and Evaluation steps. Second, those, who work in the field for a longer time (between 16 and 20 years), evaluated their involvement in the development of skills outlined in Synthesis and Evaluation steps more often.

However, in other items, there was no such consistency that those who have longer experience in the field more often than others develop information literacy skills numbered from 1 to 8. We found out that more experienced librarians develop a much wider range of information literacy skills in Lithuania case, but in Poland case is otherwise – we cannot find a clear difference in the elaboration of information literacy skills analysing by librarians experience in the field.

4 Discussion

The results of the study showed school librarians eagerness to implement stages of information literacy on a different level. School librarians are more prone to develop information literacy skills which are related to process (second and third stages) and less likely to develop skills related to using the results (content) got after implementing the process (fourth and fifth stage). These results provide further support for the hypothesis that school librarians concentrate on finding information, but less actively involved in developing skills on the use of the information found. Also, this leads us to an insight that school librarians are more prone to speak about information sources and specific tools to find it rather than organising their teaching activities as a platform for building up

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learning experiences.

Respondents mostly highlighted the emotions related to attitudes towards future improvement as a teacher, significance of teaching to them personally and feelings regarding their attitudes towards teaching, but feelings about teaching and what they feel while teaching was seen as less positive. They also avoided scoring their feelings on both ends of the semantic differential. It can let us presuppose that librarians are not confident in their role of being teachers. They want to and are proud of this activity, but teaching process is a bit harsh for them. One of the possible explanations for this situation might be related to the fact that schools do not define tasks for school librarians as clearly as they could and do not give unambiguous feedback about their teaching.

Poland and Lithuania results differ in statistical significance, and we can see a tendency that Polish results are higher than Lithuanian ones. Many factors may cause these differences. We paid attention to the two possible explanations: 1) school librarians in Poland are more matured and experienced than the ones in Lithuania; 2) Polish participants more often teach several hours' long mandatory information literacy course integrated into curricula. The official status of educational duties may cause more positive emotions arising from the perception of the importance of the job and ability to develop a wider range of information literacy skills.

The current research was not specifically designed to evaluate factors related to the impact of outside factors. This research will serve as a base for future studies on what scope information literacy is implemented at schools and what is school librarians' motivation for teaching. A further study with more focus on school librarians' knowledge in information literacy and teaching methods are therefore suggested.

6 Conclusions

The empirical findings in this study provide an understanding about the way information literacy is developed at schools. This study showed that librarians from both countries taught to locate sources, to select the best sources, and to find information within sources mostly, but gave little attention to the evaluation of information seeking and efficiency of actions implemented during the process. Implementation of fifth and sixth stages of the Big6 depended on type and Information literacy courses and experienced in the field. More experienced and those who implement mandatory courses are those who develop higher order information literacy stages. Standard deviation between the results in all items is quite high (around 0.8) and proved that school librarians in their engagement in information literacy activities are not a homogenous group.

This paper has argued that school librarians feel not confident in the teaching librarians' role. Analysis of previous research in the field showed no promising signals on the matter. According to theoretical background – school librarians do not feel confident about teaching. This study has shown that librarians are not confident in their role of being teachers, but are proud of being named as teachers. Although the results of this research support the idea that emotions experienced by teaching librarians depend on their teaching experience or type of lectures they are instructing. On the other hand, we must have in mind that our research gave the declarative knowledge which may differ from reality. Still the results show the teaching activities have a great importance for

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librarians and their attitude is quite positive about them.

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