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Media Literacy as Compared to Other Elements of the Information Literacy Model

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SUMMARY

The ever-increasing exposure of pre-school children to various media types needs to be matched by an appropriate level of media literacy development. Media literacy is a part of information literacy, whose other constituent parts are the basic, technology and library literacy.

In order to study the development of various elements within the information literacy model, as well as their interdependence, three surveys were designed intended for pre-school teachers, six-year old pre-school children in kindergartens and their parents. These three groups of respondents were selected so as to determine the correspondence and potential overlap between estimations obtained from those three groups.

The results revealed that six-year old children on average tend to be exposed to information via various media types, both at home and in kindergarten, for as much as 25 hours a week. The most frequently used source of information is television, followed by video, picture books, the computer and so on. A positive correlation between the level of media literacy and technology literacy devel-

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opment among pre-school children was also confirmed. Furthermore, in most pre-school children an initial stage of library literacy was revealed. The level of complexity of the investigation process—as a constituent part—of library literacy therefore depends on the availability of various media types (television, the computer etc.) and exposure to them. When the assessment of basic literacy development is concerned, our results indicate that letter recognition and the reading skill in six-year old children, being constituent parts of basic literacy, are not connected—with the level of information literacy development at that particular age. Additionally, the results emphasize the significance of the social component, that is, the role played by adults reading stories and other texts to children.

To conclude, owing to children's high exposure to various media both at home and in pre-school institutions, it is essential to make a systematic effort toward monitoring and improving the educational content in pre-school curricula. This calls for additional training of parents aimed at facilitating the selection of quality content. Another aspect of such training to be provided through expert advice should focus on limiting the media exposure time during which children acquire information and obtain information literacy at home.

Key words: media types, media literacy, information literacy

Introduction

The contemporary information and knowledge based society challenges the individual with tasks requiring the development and achievement of a level of competence, resourcefulness, agility, fluency and skilfulness. Dependant upon how skilful and resourceful an individual is in any particular respect, he or she is judged as either literate or illiterate. Literacy once implied an ability to read and write, however, this now includes the additional skills of speaking and listening, counting and calculating, perceiving and drawing. The original significance of the term is now referred to as basic literacy. In this profusion of different types of literacy (business literacy, health literacy, computer literacy, etc.) information literacy is conspicuous as a prerequisite for other forms of literacy. Information literacy is structurally incorporated as one of the levels of various types of literacy. Some authors (Tyner, 1998, Cope & Kalantzis, 1999, Kalantzis & Pandian, 2001) discuss the term multiliteracies to define all the literacies needed in a "digital world" related to communication and information, "notably media literacy, computer literacy, visual literacy, information literacy, network literacy and technology..." (Tyner, 1998:60). Although there are many different models of information literacy, the results will be partially interpreted according to Ferguson's model (Ferguson, 2005:9).

The National Forum on Information Literacy (NFIL, 2006) defines information literacy as "the ability to know when there is a need for information, and to be able to identify, locate, evaluate and effectively use that information for the issue or problem at hand". Basic components of Ferguson's information literacy model are: basic literacy (already mentioned/defined), library literacy, media literacy, technology literacy and visual literacy.

Understanding the differences between different forms of material (i.e. between fiction and non-fiction), understanding the Dewey Decimal System as a useful, logical system of hierarchical organization, the use of indexes and library catalogues are all skills indicating the level of library literacy strongly positively correlated to student achievement (Ferguson, 2005:11).

The National Forum on Information Literacy (NFIL, 2006) defines media literacy as "the ability to decode, analyze, evaluate, and produce communication in a variety of forms". According to Ferguson (Ferguson, 2005:12), media literacy includes understanding of the many different forms of media (newspapers, magazines, radio, television, the Internet...) and the purposes for which they can be used

In "A Report of the National Leadership Conference on Media Literacy" (Aufderheide & Firestone, 1993:6) media literacy is defined as "the ability of a citizen to access, analyze, and produce information for specific outcomes". The same papers state that "to some, analyzing was better expressed as decoding or evaluating, and producing was better explained as encoding or providing alternative expression" (Aufderheide & Firestone, 1993:6-7). Finally, Aufderheide (Aufderheide & Firestone, 1993:9) defines a media literate person as one who "can decode, evaluate, analyze and produce both print and electronic media". Furthermore, it is emphasized that the fundamental objective of media literacy is "critical autonomy in relationship to all media".

Masterman (Masterman, 1990: 128-129) emphasizes the skills of "selection, exploiting the ambiguity of visual evidence, combining image and linguistic text, suppressing the existence or effect of camera, crew and reporter, set-ups, film and sound editing, interpretative frameworks, visual coding, narrative" – subjects that could form the basis of media literacy (educational) programmes.

The same author (Masterman, 1990: 28) argues for non-hierarchical teaching modes within media education, he argues they should be: "as lively, democratic, group-focused and action-oriented as the teacher can make it" with a key objective to develop reflection and critical thinking: "to develop approaches in which student confidence can be nurtured through group dialogue, and in which students can make their own judgements, develop the ability to analyse those judgements, and so take on responsibility for their own learning and thinking".

According Tyner "media literacy attempts consolidate strands from the communication literacies that correspond with convergence of text, sound and image, including the moving image. It has been associated with the ability to make sense of all media and genre, from the more classic educational fare to popular culture" (Tyner, 1998:113).

The importance of media-literacy instruction has been emphasized by Hobbs and Frost (Hobbs & Frost, 2003) in their study of the impact upon students' com-

prehension, writing and message analysis skills. Among their its other findings, their study has determined that students who received media-literacy instruction (as compared to the control group):

- showed "improvement in the ability to identify main ideas demonstrated improvement in reading comprehension skills"
- produced "longer paragraphs and fewer spelling errors" which "are signs of continuing development in writing skills"
- "were able to describe specific techniques used by authors of different media formats to attract and hold audience attention"
- "were more likely to recognize the complex blurring of information, entertainment, and economics that are present in contemporary non-fiction media"
- and "appeared to have a more nuanced understanding of interpreting textual evidence in different media formats to identify an author's multiple purposes and intended target audiences" (Hobbs & Frost, 2003:350-351).

Technology literacy is defined as "the ability to use media, such as the Internet, to effectively access and communicate information" (NFIL, 2006). Together with technology literacy, (a related term) – computer literacy – is used as "the ability to use a computer and its software to accomplish practical tasks" NFIL, 2006) which is not isolated in the Ferguson model but rather presents it as a component of technology literacy (Ferguson, 2006:13). The National Forum on Information Literacy (NFIL, 2006) defines visual literacy as "the ability, through knowledge of the basic visual elements, to understand the meaning and components of the image." Ferguson emphasizes that visual literacy is a link between media and technology literacy, thereby teaching students to think critically about visual data (Ferguson, 2005:14).

Nowadays we are witnessing a flood of numerous media used for entertainment, rather than as a constructive means of organizing and defining free time (Janković, 1973:7, Previšić, 2000:405) as time spent outside professional engagement, i.e. the overall time and activity not defined as professional duty. Children and young people are most likely to be exposed to media, due to their lack of critical ability accompanied by a surplus of free time. Ilišin has researched into youth behaviour and concluded that the favourite activity of children and young people is watching television, especially motion pictures (Ilišin, 2000:422). Additionally, Comstok (Comstok, 1997:739) points out that "television does play a key role, although it should be considered within the context of other media and innovations". The same author suggests that "while observing and researching media one should consider the following five elements: viewers' reaction, their individual experience, cognitive aims, school progress and behavioural changes" (Comstok, 1997:739).

According to Anderson et al. (Anderson et al., 2001:2) various theories concerning media and their impact on children "fall into two broad classes: those that emphasise the content presented and those that focus on the amount of exposure to the medium irrespective of its content. (...)" Within each of these broad categories, some theories propose "effects" of television on viewers; others stress the viewers' active role in selecting and using media for particular purposes." Projects, for example, Competent Children, the aim of which is "to describe and

analyse variations and changes over time in children's and young people's cognitive, social, communicative and problem-solving competencies" (NZCER, 2006), analyze relationships between forms of literacy and exposure to different media. The results have shown that "television watching has more long-term association with children's literacy and mathematics than with their social skills or dispositions, such as perseverance" (Wylie, 2001:5). The Kaiser Family Foundation's survey Kids & Media @ the New Millennium, shows that 70% of children aged 2 to 18 have a radio in their room, 64% of which have a tape player, whereas 53% have a TV (Roberts, 1999:13). The results of this survey also show that children of that age are daily exposed to the said media for an average of 6:32 hours, the distribution of which shows television as leading with 2:45 hours, followed by CDs and tapes with 0:48 hours, print media with 0:44 hours, whereas the computer had the least exposure with 0:21 hours (Roberts, 1999:20). Recent research additionally confirms the dominance of TV as a medium (Gigli, 2004:4). The same report emphasizes a lack of quality and control, and lists various effects of the impact of mass media on children and young people (Gigli, 2004:7-8).

Gardner points out: "as far as technology is concerned, we are exactly halfway to the goal: new technologies offer amazing possibilities, yet we have to take them as a means, not as an end" (Gardner, 2005:130). In summary, the main aim of human resources (parents, educators, teachers and institutions) whilst using technology to achieve goals related to upbringing and education, is to contribute to a healthy growth and development of children.

The level of skills and competencies related to technology and media literacy is closely linked with computer skills as its inherent part. Even research conducted in the early nineties (Podmore, 1991:104, Williams & Ogletree, 1992:139) showed that children started using a computer for games and learning as early as at their preschool age, whereas nowadays the computer has a vast impact on their play, learning and socialization process (Essa, 2004:379; Donker & Reitsma, 2005:616).

Acquiring library literacy skills presupposes a level of understanding technology, i.e. being skilled and competent in the structure of technology literacy with children at their preschool age (Silverman, 1996:5; Bell & Clark, 1999).

To encourage the development of basic literacy (reading and writing), teachers use modern media to aid the development of basic reading and writing skills, particularly computers (Klerfelt, 2007:338; Pierre et al., 2005:957; Silverman, 1996:5) or television (Wright et al., 2001:1356). At this level of psychological and physical development it is necessary to provide good material to stimulate a child's cognitive development (Duncan, 2003:1471). In addition, socialization agents (parents, preschool teachers and peers), undertake a significant role in the process of learning and acquiring information at that age (Fabes et al., 2001:915; Mostov et al., 2002:1777; Hay et al., 2004:105). Lepičnik Vodopivec (Lepičnik Vodopivec, 2004: 114) especially emphasizes the responsibility and role of adults (parents and educators) in the process of developing media consciousness in preschool children.

Objectives of research

The overall objective of this research is to determine the level of information literacy development among preschool children and establish the interrelation between its constituent elements. Particular elements have been analyzed in view of a specific level of media literacy development.

The specific objectives are related to the determination of quantitative (frequency of particular media usage) and qualitative (active use and awareness of benefits provided by a particular media) indicators of information literacy levels.

In accordance with the stated research objectives, the following hypotheses have been defined:

- Media literacy development generally impacts upon the information literacy of preschool children;
- 2. It is possible to determine the interconnection between specific elements of technology literacy, library literacy and basic literacy in view of the level of media literacy development within the information literacy models.

Method

Respondents

The research was conducted on 78 children, attending regular programs of preschool education groups in a Varaždin kindergarden. The children were aged between 5.5 and 6.5 years of which. 31 were boys (39.24%) and 48 girls (60.76%).

In addition, the method was applied to one of each child's parents (79 in total). Evaluations made by preschool teachers were also collected (13 in total). An additional survey was conducted among the parents and children in order to compare the acquired data.

The research was conducted during the winter and spring of 2006. Before testing, written consent was obtained from the parents confirming their agreement for the children to participate in this research. This was necessary to assure the childrens' rights would not be violated. Additionally, upon inspection of the completed questionnaires, the kindergardten authorities granted their permission for this research to be conducted.

Measurement

Three similar questionnaires, designed for the purpose of gathering data, were given to the parents (R), the children (D) and to the preschool teachers (O), respectively. Certain questions appeared in all three questionnaires, in order for results to be subsequently compared.

Questions were constructed as likert scales. Respondents were instructed to rank, from a scale consisting of five degrees, which one they considered best described their opinions and attitudes, down to the option which least described them. In order to explain the media-related terms to children, graphic symbols were used for each term included in the likert scales. The children were individu-

ally tested by their preschool teachers. There were several questions which required the respondents to circle one of the provided answers (closed questions), others required them to answer in an allocated blank space (open questions). Upon completion, open questions were encoded in accordance with a given key.

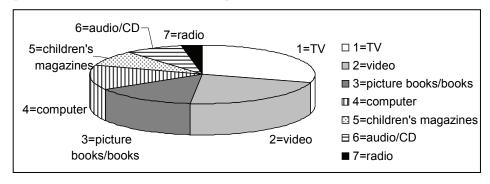
Both qualitative and quantitative indicators of levels of development of specific elements of information literacy have been used as dependent variables, i.e. objects of measurement. Accordingly, the average time of a specific medium consumption, as expressed in minutes per week, was taken as a quantitative indicator, whereas the accuracy of the childrens' open replies to the question requiring them to define the difference between radio and television was taken as a qualitative indicator of the same parameter. Moreover, as a quantitative indicator of technology literacy, the number of children having access to a computer at home or preschool institution was taken, whereas the accuracy in identifying particular parts of the computer and defining the purpose of using it were taken as a qualitative indicator. Additionally, the frequency of their visits to a children's library was taken as a qualitative indicator of library literacy, whereas their definitions of the library (in an open-type questionnaire) as well as naming basic features pertaining to referencing picture books and books (publishers, authors, titles...) were taken as qualitative indicators. Basic literacy was estimated by means of replies given by parents and preschool teachers regarding the evaluation of acquired pre-reading skills.

Interpreting results

Estimating the level of media literacy

The level of media literacy has been estimated by means of both quantitative and qualitative methods. In the first case, the overall average time children spend at home using various media types (broadcast, print, on-line) as sources of information was analysed. Figure 1 ranks the use-ratio of particular media in minutes per week Based on their parents' statements, it is evident that children watch television predominantly (M=445.21 minutes per week, sd=350.49), followed by video (M=333.92 minutes per week, sd=282.99), picture books/books (M=225.71 minutes per week, sd=163.75), a computer (M=207.86 minutes per week, sd=240.400), children's magazines (M=128.57 minutes per week, sd=140.99), audio/CD (M=123.57 minutes per week, sd=152.79), and finally, radio (M=48.93 minutes per week, sd=104.21). On the basis of this data, it was concluded that children spend approximately 25 hours per week gathering information via media at home (Kirinić et al., 2006:50).

Figure 1: The average time spent using sources of information at home in minutes per week (data source: assessment of parents)



Aside from the use frequency of any particular medium, a qualitative estimation method of familiarity with media as an element of information literacy has been used. In this manner, an estimation of accurate distinction between particular media has been conducted. Other than providing an insight into general knowledge, it is also indicative of logical verbal thinking. Children were asked whether they were able to distinguish clearly between radio and television. On the level of logical abstract thinking, 69 examined children of preschool age (88.5%) were able to accurately identify criteria of differentiation between particular media, the most frequent answer being that "radio is what you listen to, while television is what you watch". Figure 2 is a graphic representation of these results.

Estimating the level of media literacy development as an element of technology literacy

Gathered data has shown that nearly 80% of preschool children had access to a computer at home. This fact can be used as an indirect quantitative indicator of familiarity with the computer as a contemporary medium. However, apart from this quantitative indicator, qualitative methods of estimation were used to ascertain whether the children truly knew how to use a computer. Their teacher recorded correct answers whilst particular computer parts were named. These results were compared with their parents' estimates and have shown that children had achieved a different level of demonstrating media and technology literacy from that demonstrated by their parents. Thus, children who used CDs more frequently were more likely to identify the mouse accurately than those who did not use the computer as a medium (r=0.23, p<0.05), whereas according to their parents' estimation, that correlation was not statistically significant (r=-0.11, p>0.05).

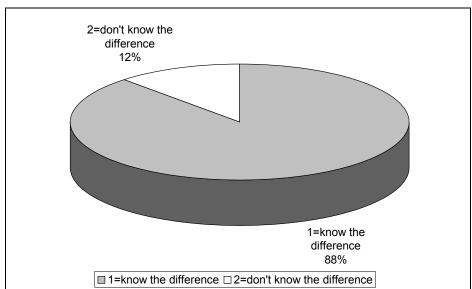


Figure 2: Accurate definition of criteria for media type distinction (radio and television)

Another measure, that of the children's self-evaluation, indicated a favourable relationship between media and computer literacy. It was found that children who more frequently used CDs as a medium believed themselves to be more adept at using a computer compared to those children who used CDs less frequently (r=0.301, p<0.01).

The interpretation of these results necessitate consideration of the limitations caused by relatively few, yet statistically significant correlations. Additionally, these results confirm the positive connection between familiarity with hardware as a tool for technology literacy (assessed by testing the accurate identification of computer parts) and the awareness of the purpose of using media in the area of media literacy. The elements of the purpose of using media are integrated within questions dealing with whether the children knew what the computer as a contemporary medium is used for – obtained answers included using the computer for study, games, searching for information on the Internet, etc. – and whether they understood the advantages of the computer, such as speed, accuracy, etc. According to the Ferguson model (Ferguson, 2005:14), media literacy and technology literacy are also linked through their common element, visual literacy. This is corroborated in (Tyner, 1998:93) "in the United States the term media literacy is often used interchangeably with information literacy and visual literacy, and many of their aims are inseparable".

Estimating the level of media literacy development as an element of global library literacy

The level of library literacy development was estimated on the basis of the childrens' ability to state what was written on front pages of picture books, irrespective of their understanding as to the purpose of a library. The results indicated that preschool children already display a fairly developed library literacy. Most children were already aware that the front page of a picture book contains the author's name and the book title (46.2%), as many as 15.4% of the children were aware that the front page contains both of these pieces of data, whereas 7.7% of them were also able to state other elements, such as "picture book number" (ISBN), "production" (publisher), etc. Approximately 30.8% of the children were not able to provide a correct answer to this question.

A substantial entry level of library literacy with preschool children is confirmed by the fact that the children were able to identify the purpose of a library. 78.2% of the children were able to answer correctly (e.g. "so you can borrow stories", "to take a book and return it for someone else to read", "so you can borrow books and be smart", etc.).

These results are interesting to interpret in the context of frequency and duration of using media as sources of information, as well as that of the level of media and library literacy development. No statistically significant correlation has been established (r<0.20, p>0.05) between the frequency of using different media (video, television, magazines, radio, the computer, picture books, children's magazines, etc.) and the level of library literacy as estimated on the basis of correct answers given by the children regarding the data stated on the front pages of publications (the question of whether they knew what was written on front pages of picture books – answers including the author, the title and even the publisher were considered as correct). No statistically significant correlation has been established between the frequency of using the above mentioned media and the level of library literacy as estimated on the basis of correct answers to the question of whether they knew the purpose of a library, or to the question of how to find out what the weather would be for the next day, for example (r<0.20, p>0.05).

This is possibly explained due to, at preschool age, information being mainly transferred through direct contacts in social interaction with peers, elder siblings, parents, preschool teachers etc., rather than by means of media (Vidaček-Hainš at al., 2006:432).

Estimating the level of media literacy development as compared to the research process as an element of library literacy

Whilst investigating the level of information literacy development, a strong emphasis was placed upon library literacy and especially the research process within that type of literacy. The idea was to ascertain how well preschool children are able to identify the suitability of different types of media to search for information. They were asked how they would find out what the weather would be for the next day, i.e. which media types could provide information about the weather forecast.

The children's answers are listed in a table (Table 1), which makes it obvious that very few children did not know where to search for that type of information (merely 12.8%). This supports the view that children are aware of how to obtain information and that they are fairly familiar with the media they can use in the process. Their answers support the fact that children link the research process within library literacy with different types of media literacy as specified in the Ferguson model of information literacy (Ferguson, 2005:9).

It is important to point out that the children's answers do not merely refer to forms of direct social interaction in communication (e.g. "I'll ask Mom or Dad"), but also to television news programs, radio news, the Internet etc. as sources of that type of information.

These results have been summarized in a table (Table 1), containing data regarding the awareness of various possibilities provided by media as sources of information. Most of the children, whilst answering this question, stated television as the medium providing the largest amount of information (nearly 80%).

Table 1: An overview of answers concerning potential sources of information, as related to the question, "How can we find out what the weather will be tomorrow?"

Sources of information	Frequencies	Percentage
Two or more media (e.g. TV, radio, newspapers, the Internet)	16	20.50
One medium (most commonly TV)	51	65.40
Interpersonal communication (e.g. asking Mom and Dad)	1	1.30
I don't know / No answer given	10	2.80
Total:	78	100.00

Estimating the level of media literacy development as compared to reading as an element of basic literacy

Reading, as an element of basic literacy, has been estimated on the basis of the children's ability to recognize letters whilst reading and their ability to synthesize letters/syllables into words. The results have shown that by preschool age, most children will have already initiated the process of synthesizing individual letters and syllables (64.1%). The remaining children (35.9%) could recognize individual letters but could not yet synthesize them. Nonetheless, this enables them to extract information from individual media serving as sources of information.

Children's magazines and picture books fall into the category of media serving as sources of information and affect the level of information literacy. An estimation has been obtained from answers given by their parents of the time, per week, spent by a child using these sources of information. It is notable that no correlation has been established between basic literacy derived from the parents' answers to questions concerning whether the child could recognize letters and the length of

time spent by a child weekly browsing children's magazines/picture books (r<0.20, p>0.05). A possible explanation is that children are not yet independent readers and will, therefore, use these media assisted by their parents' reading aloud.

Conclusion

On the basis of the conducted research, the hypothesis has been corroborated that the level of media literacy development in preschool children is related to their overall information literacy development level. Additionally, the hypothesis that it is possible to determine the interconnection between specific elements of technology literacy, library literacy and basic literacy, in view of the level of media literacy development within information literacy models, has also been corroborated.

This paper is based upon research into the level of preschool children's media literacy. As it has been established that children spend a large part of their free time (about 25 hours a week) using different types of media as sources of information, a need has arisen for quality selection of materials suitable for children. Additionally, contemporary media such as computers require additional appropriate education of parents by experts.

Media literacy has been compared to elements of the general level of information literacy development. It has been established that preschool children can accurately identify qualitative differences between different media as sources of information and can recognize and accurately identify computer parts and the function of the computer as a contemporary way to access information. This fact calls for additional education of parents so they can assist their children in selecting appropriate quality media content.

On the basis of the children's estimations, a correlation between media literacy and technology literacy as elements of information literacy has been ascertained, probably due to the frequent use of media. This is also as a consequence of social interaction with other socialization agents (e.g. elder siblings, friends, preschool teachers etc.)

The research has shown that preschool children not only show a tendency to use sources of information indicative of technology literacy (access to information via the computer) and media broadcast via television or radio (media literacy/broadcast), but also to use print materials (children's magazines, picture books). Using all of these media is not linked to the level of basic literacy estimated on the basis of the ability to recognize letters/read.

Any research into the impact of media on children should avoid stereotypes such as viewing media as presenting a hazard to children. Instead, it is preferable to view media as promoters of social relations since they open new horizons, offer the children new sources of insight in ways more interesting than their parents can provide, stimulate ideas and provide discussion points, thereby enabling children to become instructors and counsellors to other children. Naturally, this does not imply that children should spend all their free time exposed to media. Rather, it is desirable to pursue a combined approach to children's activities. Thus, the com-

puter can become a medium stimulating the development of self-esteem, creativity, communication skills, collaborative learning etc.

Given the research has been conducted on a highly sensitive age group - children who are still developing intensely, the results of such research calls for the necessity to carefully select quality educational content for the children to encounter via media, together with the additional need to educate all the agents involved in social interaction (parents, preschool teachers and other professionals working in preschool education) and the involvement of experts from other areas responsible for designing media content. With regard to the educational context of preschool institutions, media and information education is a part of the preschool curriculum (Ministarstvo prosvjete i športa, 1991). However, according to educators, certain features accompanying modern technological trends are still missing. Thus, in the course of this research, a number of recommendations provided by educators have been gathered with regard to additional training models with a view to gaining insight into appropriate ways of using contemporary media in preschool institutions. Their suggestions primarily apply to training people to select quality content and define the frequency of use / time of exposure to contemporary media, especially the computer. So far, only a basic training of computer use has been provided.

An outstanding example of best practice in this field is an educational foundation "Cable in the Classroom" (Kubey et al, 2003: I), whose educational philosophy identifies the key elements to which every student and teacher is entitled: visionary and sensible use of media and technology, engagement with rich content, membership in a meaningful community of learners, excellence in teaching and the support of parents and other adults.

To conclude, other than the need for organizing further training for preschool teachers, these results should be supplemented by evaluations of the levels of social and cognitive development of preschool children. An analysis of correlations between these variables and the overall level of information literacy development will be undertaken with a particular reference to media literacy.

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Odnos medijske pismenosti s ostalim elementima modela informacijske pismenosti

SAŽETAK

Sve veća izloženost djece predškolske dobi različitim vrstama medija zahtijeva i sve višu razinu razvoja medijske pismenosti. Medijska pismenost, uz bazičnu, tehnološku i knjižničarsku pismenost, čini sastavni dio modela informacijske pismenosti.

U svrhu ispitivanja razvijenosti i međuodnosa različitih elemenata unutar modela informacijske pismenosti, konstruirane su tri ankete namijenjene odgojiteljicama u dječjem vrtiću, roditeljima i polaznicima dječjih vrtića u dobi od 6 godina. Ove tri skupine ispitanika odabrane su kako bi se ustanovile podudarnosti i preklapanja između njihovih procjena.

Dobiveni rezultati pokazuju da šestogodišnjaci učestalo kod kuće i u vrtiću prate informacije putem različitih vrsta medija, i to prosječno čak oko 25 sati tjedno. Tako su njihovi najčešći izvori informacija TV, zatim video, slikovnice, računalo itd. Potvrđena je i pozitivna povezanost između razine razvoja medijske i tehnološke pismenosti kod djece predškolske dobi. Nadalje, većina djece predškolske dobi pokazuje i početnu razvijenost knjižničarske pismenosti. Tako i razina složenosti istraživačkog procesa kao sastavnog dijela knjižničarske pismenosti ovisi o dostupnosti i izloženosti različitim vrstama medija (TV, računala i dr.). U okviru procjene razvoja bazične pismenosti dobiveni rezultat ukazuje na to da poznavanje slova i vještina čitanja koji predstavljaju sastavne dijelove bazične pismenosti nisu povezani s razinom razvijenosti informacijske pismenosti u toj dobi. Rezultat do-

datno ukazuje i na važnost socijalne komponente, odnosno uloge odraslih koji djeci čitaju priče i ostale sadržaje.

Zaključno, zbog velike izloženosti djece različitim medijima kod kuće i u predškolskim ustanovama, vrlo je važno sustavno praćenje i rad na podizanju kvalitete obrazovnih sadržaja obuhvaćenih programom predškolskog odgoja. Jednako je nužno potrebna dodatna edukacija roditelja u obliku savjeta stručnjaka za kvalitetnu selekciju sadržaja i ograničavanje vremena u kojem djeca kod kuće usvajaju informacije i stječu informacijsku pismenost putem različitih medija.

Ključne riječi: vrste medija, medijska pismenost, informacijska pismenost