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# CRITICAL EXAMINATION OF THE IEET MEASUREMENT INSTRUMENT FOR THE ASSESSMENT OF TEXTBOOK QUALITY

## ABSTRACT

As is the case in other sectors of the creative industry, the publishing industry also evaluates its projects finalized in the form of products and services in the market of creative contents. This paper aims to investigate the IEET measurement instrument that enables quality evaluation of products in the publishing industry. Quantitative research was conducted for the purpose of testing the main hypothesis of the study by which the quality of products in the book publishing industry features objectively measurable characteristics that can be determined by analysing user opinions. In this paper, an elementary school textbook has been selected as a publishing industry product and 147 respondents were involved in the research. Respondents, who evaluated the quality of the product by using the IEET measurement instrument, were selected according to the criterion of using a publishing industry product (textbook) in the educational process.

After an exploratory factor analysis, the dimensions of the IEET measurement instrument were confirmed. A correlation analysis was applied to test the correlation between the identified dimensions and the most important textbook characteristics. The research results are critically reconsidered and can be utilised as guidelines for future research.

**Keywords:** Creative industry, publishing industry, textbook, correlation analysis, factor analysis

## 1. Introduction

According to Horvat, Mijoč and Zrnić (2018), the creative industry implies copyrighted production covered by the projects generating (non-)material products and services intended for market exchange. The creative industry in Croatia is currently in the process of institutionalisation where the publishing industry is its integral part (Hesmondhalgh, 2002; Throsby, 2001; WIPO, 2003; UNESCO, 2013; DCMS<sup>1</sup>). Publishing and other creative industry sectors evaluate their projects finalised in products (and services) on the creative content market. The creative industry contributes to the economic development in general, has an export potential and is based on knowledge, science, technological and art innovation, development of talents and preservation of national cultural heritage through its implementation into contemporary products and services (Horvat et al., 2018: 16). The importance of the book as a creative industry product is also stressed by Tomašević (2015), who describes the book, which is a product of the publishing industry, as a resource that might have a direct impact on various cultural segments, i.e. that might be used to address consumers of cultural goods and services.

An elementary school textbook was selected as a publishing product analysed in this paper. Textbook publishing is a unique and distinct field of the publishing industry, and in addition to commercial and professional publishing, it is considered to be one of the most important and lucrative market segments (Hemmungs Wirtén, 2004). Pingel (2010) sees a textbook publisher as an innovator, as a stakeholder in the educational process that innovates to produce a modern textbook of high quality. He believes that there is a close link between marketing procedures, funds that buyers have at their disposal and the innovative capacity of publishers, as well as the resources they are able to invest in new books. Publishers who respond every year to new customer requirements must be flexible, adjust their books to new teaching methods, and change the contents in line with new developments or discoveries. In addition, Pingel (2010) states that there are different textbook markets which consequently affect the role of publishers in the educational process as well as the production of textbooks. Even if a free market exists, the state often controls the use of textbooks

by introducing an official textbook approval procedure (the textbook approval system). In the process of selecting a new textbook, the publisher, as a textbook producer, is directly interested to have the highest quality possible and to be able to offer relevant quality assurance for the textbook they publish. Although there are different approaches in defining and measuring the quality of textbooks (Luft, Patterson, 2002; Swanepoel, 2010; Pingel, 2010; Dimopoulos et al., 2005; Pingel, 1999; Roseman et al., 1999; Wilkens, 2011), in this paper the authors are focused on the measurement instrument proposed by Swanepoel (2010). In the Republic of Croatia, the quality of textbooks has been evaluated through questionnaires and research conducted by the Ministry of Science and Education<sup>2</sup> and the Croatian Academic and Research Network – CARNET. Respondents for the first research were teachers who evaluated the quality of a printed textbook as a teaching material whereas the second research (CARNET) was aimed at assessing the quality of digital teaching materials<sup>3</sup>.

The objective of this paper is to determine the publishing aspects of textbook design through objectively measurable characteristics by using a modified IESET<sup>4</sup> measurement instrument and the IEET<sup>5</sup> measurement instrument. The formatting of a textbook as a publishing product implies four most important aspects: methodical, linguistic, content and presentation (graphic art) design. The appropriateness of selecting a textbook as a publishing product is reflected in this research in the market and educational role of textbooks since Hummel (1988) states that with the help of textbooks it is possible to recapitulate, assimilate, and further internalise what the reader has mastered in the learning process. Hummel (1988) concludes that it is the quality of textbooks that encourages the user to think, as it stimulates critical thinking. Following the above, it is noted that the quality of textbooks will affect market competition, or ultimately the educational process. Since textbook quality is a multidimensional construct, Sursock (2001) defined it as the readiness of a textbook to achieve its purpose, because the quality of a textbook is indicated by the ability of a textbook to provide support for consumers (of a publishing product) in achieving their educational goals.

This paper is focused on teachers' views on textbooks, i.e. Croatian language reading books for 8<sup>th</sup> grade elementary school pupils, and analyses them as an object of research. Teachers are the key users of the textbook, and their views on a quality textbook are treated as an indicator of (user) expectations of a quality textbook. In accordance with the main objective of the paper, another objective of the research was set, which implied the adaptation of the IESET measurement instrument to the IEET measurement instrument to ensure that the characteristics of a quality textbook are measured. The adaptation was necessary to adapt the characteristics of the IESET measurement instrument, originally intended for scientific textbooks, to the needs of the IEET measurement instrument, which should enable the measurement of the characteristics of an elementary school textbook that is the object of this research.

## **2. Research problem definition**

Textbook publishing is a responsible activity, i.e. one of the most responsible activities in the entire publishing business. The entire education system relies on the textbook, it is a fundamental teaching tool and thus ethically, linguistically, methodically, contentually and visually it must be a perfect product. The research problem lies in the fact that objective criteria for textbook evaluation are not used in its production, evaluation, approval for use in schools and the use itself. It can be said that the publisher provides support for the education system, but without knowing anything about the quality of support publicly available to the publisher and other participants in the system, i.e. it is not known how strong that support is.

One of the publisher's tasks is to achieve better learning outcomes of pupils (Wilkens, 2011). In order to define the publisher's role in the education process, but also in the textbook approval system, sometimes the literature cites the experience of Finland as a country with the best education scores in the PISA tests. Horsley<sup>6</sup> (2012) believes that the reason behind the Finnish success is, *inter alia*, that huge financial resources are invested in high-quality textbooks and other teaching and learning materials. Finland has developed a process of creating textbooks that promotes learning and engagement and is focused on pupils. The result is that Finnish

publishers are a key component of the education system – all stakeholders also recognise their key role in providing high-quality teaching and learning materials.

In terms of a textbook as a publishing product, in this paper we analyse textbook quality. Various methods are used for textbook quality evaluation. According to Mikk (2000), classification methodology distinguishes between experimental research (measuring learning outcomes), user reviews and textbook analysis, and recommends a combination of two or more methods for validating results. Textbook analysis is potentially the best method of assessing textbook quality in a predictable situation, e.g. when selecting a textbook. Scriven (2003) identifies eight evaluation models that are classified according to the role of evaluators in the evaluation process: a quasi-evaluation model, a goal-achievement model, an outcomes-based model, a consumer-oriented model, a formative-only model, a participatory model, a theory-driven model and a power model. Previous research points to the need for setting up an instrument for measuring the quality of textbooks, the IESET measurement instrument being one of them.

## **3. Adaptation of the IESET to the IEET measurement instrument**

The objectives of the paper necessitated selection and adaptation of the measurement instrument intended for measuring the quality of textbooks. According to Swanepoel (2010), the importance of good textbooks for science education makes it imperative to have good methods for selecting textbooks. Swanepoel (2010) starts the development of the IESET instrument with the identification and formulation of relevant items for measuring the quality of science education textbooks, which were selected from the literature, taken or adapted from existing instruments and derived from the stakeholders' interests.

The original IESET measurement instrument contained 58 items. An adapted measurement instrument made for research purposes is called the IEET measurement instrument and it contains 45 items. The adaptation of the IESET measurement instrument to the IEET measurement instrument started with the adaptation and formulation of relevant items.

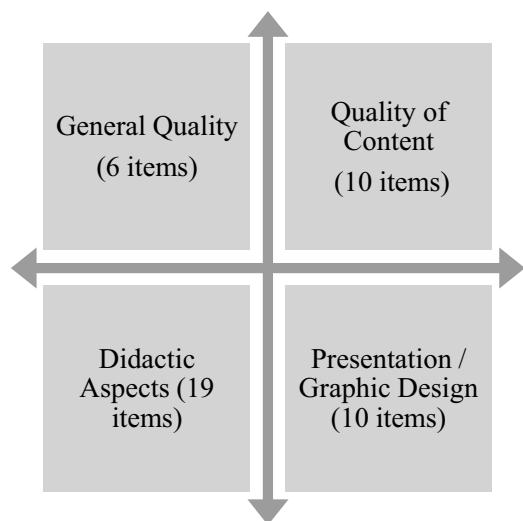
The process of validation and adaptation of the measurement instrument consisted of three phases of the pilot study in which various experts tested the validity of the IEET measurement instrument. All pilot study participants tested the IEET measurement instrument as users of the analysed publishing product:

- Phase 1: two national experts in the field of the tested publishing product,
- Phase 2: four users of the tested publishing product,
- Phase 3: twelve users of the tested publishing product.

For the general assessment, different approaches yielded 48 items that contribute to the quality of a textbook. These items were structured to give a hierarchy that consists of four (latent) dimensions. The number of dimensions in the hierarchy reflects the complexity of textbook quality evaluation. In order to verify whether the items and hierarchy are representative of textbook quality (content validity) they were presented to two experts in the field of the tested publishing product (Phase 1). The experts were given the opportunity to study the hierarchy, agree or disagree with the categories or items or suggest new ones. They were also given the opportunity to move items to other categories or dimensions of the hierarchy. In the light of new contributions, the number of items was reduced to 45, but the original dimensions were retained. The proposal of the IEET measurement instrument continued its testing process and four teachers - textbook users were selected to fill in a questionnaire and comment on the proposed measurement instrument (Phase 2). When the proposed changes were made, the instrument was tested by 12 teachers from different schools (Phase 3). All participants in this research are textbook authors/proofreaders in the field of this research, well qualified and with many years of school work experience. Publishing product users (teachers) used the proposed IEET measurement instrument to assess the quality of the textbook in the field of this research<sup>7</sup>.

The adapted IEET measurement instrument was used to investigate the teachers' attitudes towards the quality of the analysed publishing product. As shown in Figure 1, the instrument is divided into four dimensions (in this case, ethical and linguistic values are incorporated in the general part).

**Figure 1 Dimensions of the IEET measurement instrument**



Source: Authors

As a result, it is possible to pose the main research hypothesis of the paper that was designed to test the metric characteristics of the IEET measurement instrument and to accomplish the first basic objective of the paper, i.e. the adaptation of the IEET measurement instrument to the IEET measurement instrument, or identification of latent dimensions of the IEET measurement instrument to ensure a (reliable) measurement of the characteristics of a quality textbook:

*H1: The IEET measurement instrument has reliable dimensions by means of which the quality of a textbook can be measured.*

### **3. Empirical verification of the IEET measurement instrument for the assessment of textbook quality**

#### **3.1 Unit of analysis and measurement instrument**

An elementary school textbook was selected as a publishing product analysed in this paper and 147 respondents participated in the research. The respondents were selected pursuant to the use of the

publishing product in their classes and the quality of the publishing product was evaluated by the IEET measurement instrument. The respondents were asked to "evaluate to which extent each parameter is important for evaluating the textbook". They used a five-point Likert rating scale ranging from one to five, where 1 meant "not important at all", 2 "not important", 3 "neither important nor unimportant", 4 "important", and 5 "extremely important".

### 3.2 Sample description

In the first (recruitment) phase, school division co-ordinators of two Croatian publishing companies were consulted in four regional centres: Zagreb, Rijeka, Split and Osijek. The coordinators randomly selected contact details of teachers in their respective teacher databases. After merging the contacts from the four coordination centres, a new database was created that consisted of 290 teachers, i.e. users of the analysed textbook.

The data were collected using two methods of data collection, 1) network data collection (respondents received an e-mail message with a link to the survey, i.e. network questionnaire) and 2) data collection via regular mail. A link to the network questionnaire was sent by electronic mail to those respondents whose contact details in the database contained their e-mail addresses, while the remaining questionnaires were sent by regular mail and the responses were collected by a paper-and-pencil method.

Online data collection started in September 2015, and the data link was closed at the end of October 2015 (until the questionnaires sent by e-mail were returned). Data collection by regular mail started in November 2015 and was open until the end of January 2016. Paper questionnaires were returned in two ways, either by return mail, or by personal contact. The questionnaire was completed by a total of 184 teachers, and after data cleaning, 149 questionnaires were used in research analysis. Some questionnaires ( $n = 34$ ) were excluded from further analysis due to incomplete responses (over 40% blank cells). Incomplete questionnaires were returned from an online survey that took 25 minutes to complete. The research sample is described in Table 1.

**Table 1 Sample description**

Variable	n	%
<b>Gender</b>		
Male	10	6.8
Female	137	93.2
Total	147	100.0
<b>Regional centres</b>		
Zagreb	65	45.1
Rijeka	21	14.6
Split	38	26.4
Osijek	20	13.9
Total	144	100.0
<b>Education</b>		
Bachelor's degree	140	95.9
Master's degree	4	2.7
PhD degree	2	1.4
Total	146	100.0
<b>Type of settlement</b>		
Rural	31	21.8
Urban	111	78.2
Total	142	100.0

*Source: Authors' calculations*

The sample consisted mostly of female respondents (i.e. 93.2%) and only 6.8% male respondents. Given the description of their occupation, it was expected that all respondents would have obtained a university degree. If we look at the respondents across the regions in the Republic of Croatia, as expected, most of them come from the Zagreb area (45.1%), then the Split area (26.4%), the Rijeka area (14.6%), and finally the Osijek area (13.9%). The described sample is homogeneous by gender (female respondents 93.2%) and education (95.9% with a degree), and is part of the urban population (78.2%).

### 3.3 Methods of data analysis

Reliability assessment was analysed for each construct that was measured. Reliability refers to the consistency of respondent responses to an identical or similar question, by which researchers try to answer the question whether the set of observed statements measures the same construct (Milas, 2005). Internal consistency of measurement instru-

ment dimensions is most often measured by the Cronbach's alpha reliability coefficient. Cronbach's alpha represents a generalised form that measures internal consistency of the measured construct. According to Nunnally (1979), Cronbach's alpha coefficient values of more than 0.7 are considered acceptable, but it is recommended to strive for correlation coefficient values greater than 0.8. The selected statistical methods are in line with the posed hypothesis, i.e. with the testing of the measurement instrument.

Multivariate statistical methods enable us to study problem situations in multidimensional spaces and thus provide a realistic insight into all aspects of the studied structure (Halmi, 2003). Halmi (2003) states that factor analysis is a set of statistical and mathematical procedures that allows for a smaller number of fundamental variables (factors) explaining

the interrelation to be derived from a larger number of related variables. Data collected through quantitative methods were analysed with the help of the IBM SPSS Statistics 23.0 statistical software.

#### 4. Results

Descriptive statistical analysis, exploratory factor analysis, and reliability analysis were used to test the posed hypothesis (H1). Formally and logically constructed IEET measurement instrument dimensions were tested using exploratory factor analysis.

As the *General Quality* dimension is a multidimensional concept, its items were subjected to separate exploratory factor analysis. The rotated factor loading table (the Varimax method using the Kaiser criterion) brings exploratory factor analysis results of the *General Quality* dimension.

Table 2 Factor analysis of six items in the General Quality dimension of the IEET measurement instrument

Items	Factors		
	1	2	3
	Presentation	Didactic	Content
Binding.	.926		
Paper quality.	.920		
Didactic features adapted to the intended learner population.		.886	
Language and style appropriate for the intended learner population.		.876	
Promotion of sensitivity to diversity (sex/gender, cultural groups, religion).			.906
Promotion of values (democracy, social structures and justice, environment).			.845
% Total Variance Explained	29.17	27.22	26.89
Cumulative % Total Variance Explained	29.17	56.39	83.28

Source: Authors' calculations

By factor analysis, six items of the *General Quality* dimension of the IEET measurement instrument were categorised into three factors. The first factor refers to *presentation* because it contains two items (binding and paper quality), which predominantly describe what is incorporated by the concept of presentation. Presentation is one of three latent dimensions that contribute to the highest variance explained (29.17%). The second factor is *didactic*, since as a latent dimension it combines two didactic items (didactic features adapted to the intended learner population and language and style appropriate for

the intended learner population) and accounts for 27.22% of variance. The third factor refers to *content*. The third factor also combines two items (promotion of sensitivity to diversity and promotion of values), explaining 26.89% of variance. The cumulative total variance explained of the whole construct *General Quality* accounts for 83.28%, thus justifying the implementation of factor analysis.

It is a factor that has separate dimensions (i.e. the presentation factor, the didactic factor, and the content factor). These three factors contribute to the overall quality of the textbook, and the proposed

IEET measurement instrument treats each of these dimensions separately.

The classification of the remaining dimensions of the IEET measurement instrument was checked by exploratory factor analysis. The suitability of factor analysis for the observed three dimensions was evaluated by the Kaiser-Meyer-Olkin test (0.890) and Bartlett's test ( $\chi^2 = 2506.396$ , df = 496,  $p < 0.001$ ). The rotated factor loading table (the Varimax method using the Kaiser criterion) confirms a theoretical distribution of items by three factors:

*Content Quality, Didactic Aspects and Presentation/Graphic Design.* By factor analysis, of the initial 45 IEET measurement instrument items (minus six items referring to the *General Quality* factor), the instrument was reduced to 39 items, with eight items excluded. The final dimensions of the tested IEET measurement instrument are described by item-to-factor distribution, and the variance explained and Cronbach's alpha as an indicator of internal consistency of the factor were measured for each factor (Table 3).

**Table 3 Factor analysis of three dimensions (i.e. Quality of Content, Didactic Aspects and Presentation/Graphic Design) of the IEET measurement instrument**

Items	Factors		
	Didactic Aspects	Presentation and Graphic Design	Quality of Content
Encouraging student creativity.	.696		
Caters for varied ability.	.666		
Encouraging active participation (engagement).	.662		
Various types of communication opportunities (writing, speaking, reading, answers, reports, presentations).	.650		
Clear purpose.	.633		
Variation in social combinations (individual, pair, group, etc.).	.630		
Examples in different applications (examples and explanations).	.625		
Learner-centred examples (activities).	.614		
Encouraging the development of language skills.	.567		
Everyday relevance indicated.	.561		
Learners are encouraged to form connections.	.529	.369	
Encouraging the development of literary competence.	.500		
Contemporary approaches to interpreting (literary) texts.	.432		.391
Appropriate graphical solutions of headings and signalling devices.		.792	
Adequate technical quality.		.741	
Table of contents.		.716	
Images relevant to the text.	.395	.713	
Detailed captions.		.691	
Images with active functions.	.497	.630	
User-friendly content.		.608	
Clear and logical layout structure.		.599	
Appropriate print size and font.		.519	
All core knowledge addressed (from the curriculum).			.784
Logical progression (sequencing).	.350		.719

Items	Factors		
	Didactic Aspects	Presentation and Graphic Design	Quality of Content
Learning outcomes appropriately weighted.			.717
Language and style appropriate for the intended learner population.			.682
Prior knowledge mentioned.			.677
Appropriate scientific vocabulary.			.580
Accurate facts.			.560
Introduction of new concepts.	.419		.427
Integration (within and with other learning areas).			.369
% Total Variance Explained	18.46	15.57	15.09
Cumulative % Total Variance Explained	18.46	34.03	49.12

Source: Authors' calculations

After performing exploratory factor analysis with the described psychometric characteristics, the IEET measurement instrument dimensions were confirmed

(Table 4). Each of the IEET measurement instrument factors is analysed separately and the factors have a satisfactory level of reliability (Cronbach's alpha > 0.8).

**Table 4 Checking internal consistency of the IEET measurement instrument factors**

Items	Quality of Content	Didactic Aspects	Presentation and Graphic Design
Number of items	9	13	9
Cronbach's Alpha	0.862	0.899	0.885
Cronbach's Alpha Based on Standardised Items	0.866	0.901	0.885
Items Mean	4.354	4.392	4.142
Inter-Item Correlations Mean	0.418	0.411	0.462
Item-Total Correlation Mean	0.596	0.606	0.637
Scale Statistics	Mean	39.19	57.09
	Std. Deviation	4.37	5.87
			4.76

Source: Authors' calculations

The statistical procedures performed indicate the reliability of all three factors. The reliability coefficient *Quality of Content* is exceptionally high (0.866) and it can be concluded that the 9 items observed excellently measure the quality of content in the procedure of measuring the quality of the textbook. The average correlation to the measured construct is 0.596, and the smallest correlation of some of the items to the measured construct does not exceed the recommended acceptance limit of that confidence level (0.451). The correlation among the items is also acceptable (the average correlation and

the smallest correlation among the items are 0.418 and 0.247, respectively).

The reliability coefficient *Didactic Aspects* is also high (0.901) and it can be concluded that the observed 13 items excellently measure didactic aspects in measuring the quality of the textbook. The average correlation to the measured construct is 0.606, and the smallest correlation of some of the items to the measured construct does not exceed the recommended acceptance limit of that confidence level (0.518). The correlation among the items is also acceptable (the average correlation and the smallest

correlation among the items are 0.411 and 0.229, respectively).

Like the other factors, the reliability coefficient of the factor *Presentation and Graphic Design*, which was observed last, is also high (0.885), and it can be concluded that the 9 items observed excellently measure presentation and graphic design in measuring the quality of the textbook. The average correlation to the measured construct is 0.637, and the smallest correlation of some of the items to the measured construct does not exceed the recommended acceptance limit of that confidence level (0.506). The correlation among the items is also acceptable (the average correlation and the smallest correlation among the items are 0.462 and 0.254, respectively).

Based on the evidence presented, it is possible to confirm the hypothesis that the IEET measurement instrument has dimensions that can be used to measure the quality of a textbook. The tested measurement instrument has three dimensions (a general dimension is omitted because it does not meet the criteria of the following analysis), i.e. *Quality*

*of Content, Didactic Aspects and Presentation and Graphic Design*.

Aggregate variables are generated by the items of individual factors based on the calculation of the average rating of all items classified into a single dimension.

A correlation analysis was performed for the identified dimensions to test the correlation with the most important characteristics of the publishing product that were singled out by respondents in the survey (6 statements that were rated as the most important ones - average rating greater than 4.5). This analysis is carried out with the aim of understanding the reasons for selecting the items (6 most important ones), but also the functions of the given parameters. A correlation analysis was performed to test the correlation among the identified dimensions as key to measuring the quality of the textbook. In order to demonstrate the importance and uniformity of the measurement of both approaches (Table 5), a statistically significant link is expected between the IEET dimensions and the variables singled out by the editors, authors, and teachers as important for assessing the quality of the textbook.

**Table 5 The correlation between the IEET dimensions and the most significant items singled out by the editors, authors and teachers**

Items	Didactic Aspects		Presentation and Graphic Design		Quality of Content	
	r	p	r	p	r	p
The choice of texts is important for a quality textbook.	.169*	.040	.323**	< .001	.275**	.001
The texts should be appropriate for the intended learner population.	.270**	.001	.284**	< .001	.330**	< .001
The texts of all three literary genres should be included in the textbook.	.356**	< .001	.211**	.010	.303**	< .001
A quality textbook aims at improving reading comprehension.	.204*	.013	.312**	< .001	.229**	.005
When preparing a textbook, it is important that the author possesses great knowledge about the methodology and terminology.	.359**	< .001	.462**	< .001	.416**	< .001
A textbook is the most commonly used teaching material in literature classes.	.263**	.001	.319**	< .001	.214**	.009

r – Pearson's correlation coefficient

\*\* p – statistically significant at a significance level of 0.01

\* p – statistically significant at a significance level of 0.05

Source: Authors' calculations

In all correlation analyses, a statistically significant positive correlation has been observed, which justifies the measurement of the quality of a textbook according to specific characteristics singled out by the editors, authors and teachers.

### **5. Discussion and conclusions**

The quality of a textbook is crucial in the process of mastering the teaching material. As the process of selecting (and using) a textbook involves many stakeholders (editors, authors, teachers), it is expected that they will rate textbook quality differently. In order to overcome controversies in the process of evaluating the quality of a textbook, it is necessary to construct (and evaluate) a measurement instrument used for measuring the quality of a textbook. A research methodology for constructing such a measurement instrument (the IEET measurement instrument) is presented in this paper, and its dimensions and fundamental characteristics are investigated.

Although the IEET was constructed by adapting the IESET measurement instrument, the paper showed that the national education system requires a customized measurement instrument with its own characteristics standardised by national law. The proposed and tested IEET is the starting point for future researchers of related phenomena.

The development of a measurement instrument used for measuring the quality of a textbook is based on the assumption that such a measurement

instrument must have metering dimensions. With the aim of designing a quality measurement instrument, we proposed the IEET measurement instrument for whose dimension's statistical validity and reliability tests were carried out. As this is a measurement instrument adapted on the basis of the existing IESET measurement instrument, it is important to stress that adaptation had to be done for the following reasons: a) specificities of the national education system, b) adjustment of the instrument used for measuring the quality of the scientific textbook to an instrument used for measuring the quality of an elementary school textbook, and c) testing its suitability with regard to a variety of stakeholders (authors, teachers, pupils). The limitation of this research is primarily due to the fact that only one textbook was selected for this study.

The recommendation for future research is to further adjust the IEET measurement instrument to enable comparative measurement of learning efficiency by means of print and digital materials. Namely, on the basis of such research results, it would be possible to draw conclusions about the effectiveness of the textbook with regard to its technical performance (print vs. digital). Future research needs to investigate the differences between a printed and digital textbook, and the impact of digital teaching material on students' reading habits. The final implementation of the IEET measurement instrument would require participation of the competent ministry in the process of selecting a textbook published by a particular publisher to be used in class.

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# ISTRAŽIVANJE KVALITETE NAKLADNIČKIH PROIZVODA IEET MJERNIM INSTRUMENTOM

## SAŽETAK

Nakladništvo, kao i ostali sektori kreativne industrije, svoje projekte finalizirane u proizvode i usluge eva-luirane na tržištu kreativnih sadržaja. Svrha je ovoga rada istražiti mjerne instrumente kojima je moguće evaluirati kvalitetu nakladničkih proizvoda. Sa svrhom testiranja glavne hipoteze rada prema kojoj kvaliteta nakladničkog proizvoda posjeduje objektivno mjerljive karakteristike koju je moguće utvrditi analizirajući stajališta korisnika nakladničkih proizvoda provedeno je kvantitativno istraživanje. Kao nakladnički proizvod u ovom radu izabran je udžbenik u osnovnoškolskom sustavu te je u istraživanju sudjelovalo 147 ispitanika. Ispitanici su odabirani prema kriteriju upotrebe nakladničkog proizvoda u nastavnom procesu koji su kvalitetu nakladničkog proizvoda procjenjivali IEET mjernim instrumentom.

Nakon provedene eksploratorne faktorske analize uz opisane psihometrijske karakteristike, potvrđene su dimenzije IEET mjernog instrumenta. Za identificirane dimenzije korelacijskom analizom testirana je povezanost s najvažnijim karakteristikama nakladničkog proizvoda koje su u istraživanju izdvojili ispitanici. Rezultati istraživanja kritički su promišljeni na temelju čega su dani naputci budućim istraživačima.

**Ključne riječi:** kreativna industrija, nakladnički proizvodi, nakladništvo, korelacijska analiza, faktorska analiza