

Model Individual As Actor Animation Assist Edutainment In Writing Short Stories By APIPSU Medan Vocational High School Students

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ABSTRACT: The purpose of this study is to describe the development of the model individual as actor animation assisted edutainment in writing short stories at SMKS APIPSU Medan. The problem found in the field is the lack of interest in the model students used in learning to write short stories. This type of research is development research or also called design research. The research design consists of several stages, namely: 1) preliminary research (preliminary research); 2) prototype stage (phase prototyping); 3) assessment stage (assessment phase). This study aims to develop a product by testing the validity, practicality, and effectiveness. Data collection techniques used include interviews, observations, questionnaires, tests and literature review. Data analysis techniques validity and practicality test (expert review, one-to-one evaluation, small group evaluation), Effectiveness test data analysis techniques (normality test, homogeneity test, test t (one-tailed test). The findings of this study are the results of the study showing that the model individual as actor developed is proven to be valid, practical and effective for use in schools. Model individual as actor animation assisted edutainment proven to improve short story writing skills.

Keyword: Actor Animation, Edutainment in Writing, APIPSU.

INTRODUCTION

Along with the rapid development of information and technology, education also develops according to the needs of the times. This makes learning models varied and diverse, ranging from manual to online. One of the learning models that are considered capable in learning to write short stories is the learning model individual as actor, namely a learning model that uses audio-visual media tools (images, animated videos, and films). In line with opinion Shabiralyani et al (2015) states that exploring teacher opinions can be done using audio-visual aids (pictures, videos, animations, projectors) to improve students' reading literacy skills.

The use of audio-visual media can increase

attention and motivation in the learning process. The same thing Gejel (2012) also states that media that are suitable for the latest learning are digital photography, video, animation, social games, social networks, all kinds of software, and hardware. Through information technology, students are easier to receive messages that are equated by the teacher in the learning process, so that learning is more effective, efficient and fun. One of the literary studies that often gets attention is writing short stories at the context level. Learning to write short stories is built on the freedom of imagination (Ikhwanuddin, 2015). The problem of learning literature in senior high schools revolves around theoretical studies, resulting in students not being skilled in writing short stories, but

only able to master theory. This makes students shackled in theory, unable to write short stories in practice (Rohman, 2012). Referring to research that has been done that the effectiveness of learning using information and communication technology/ICT is better than traditional or conventional learning. Chaudhari (2013) adds that technology in learning includes additional instructional strategies in effective learning.

Hardware and software in the world of technology are also used as learning aids for all subjects, with no exception in literature. Basoz & Cubukcu (2014) revealed that recently computers or technology as learning aids have become at the forefront of learning and teaching literature. The same thing Mathew & Alidmat (2013) revealed that it is a common phenomenon to integrate language textbooks with audio and video as additional resources for language learning activities in the classroom. Bello (2016) found that there is a significant relationship between audio-visual media and environmental factors in the success of students' academic performance. In addition, Nurhayati (2011) also proves that by playing imagination and mind maps (mind map) turned out to be successful in improving short story writing skills in Class X SMA Smart Ekselensia Indonesia, while the scores obtained showed teacher activity in cycle I was 71.73% and increased in cycle II was 96.73%, while the student activity in cycle I got the value of 70.65% increased in

the second cycle 94.56%. The creativity of students in the first cycle was 58.53% and increased in the second cycle was 85.35%. Then Batubara (2013) succeeded in proving that learning to write short stories was more effective using comic media compared to conventional techniques for class X students of SMA Negeri 2 Kabanjahe. In a similar study, Aji (2011) also proved that using short film media is more effective than learning to write short stories without using short film media.

Based on initial observations made by distributing questionnaires to students, 38.9% of students answered that learning to write short stories was very difficult, 22.2% of students answered difficult, and 38.9% answered not difficult. As many as 44.4% of students answered that lecturers always use the lecture method in learning to write short stories, 27.8% answered always, and 27.8% answered rarely. A total of 72.2% of students answered that effective learning in writing short stories was very important, 27.8% answered important, and 0% for not important. A total of 77.8% answered if the learning model edutainment very important, 22.2% answered important, and 0% answered not important. A total of 66.7% of students answered that the learning model for writing short stories was assisted by animation edutainment very important, 33.3% answered important, and 0% answered not important. The following is Table 1 of the results of the initial observations.

Table 1. Results of preliminary research observations

Question Answer	Level difficulty learning writing short stories	Use lecture method in writing short story	Importance learning effective in writing short stories	The importance of individual models as actor learning with the help of animation edutainment
Very difficult	38,9%			
Difficult	22,2%			
Not hard	38,9%			
Very often		44,4%		

Often	27,8%
Seldom	27,8%
Very important	72,2%
Important	27,8%
Not important	0%
Very important	66,7%
Important	33,3%
Not important	0%

Referring to these results, it can be concluded that learning to write short stories is less attractive to students, because the main causal factor lies in the learning model used by the teacher. Students are taught theory about writing short stories, but students are not trained comprehensively to write short stories. The results are shown in the average results of the questionnaire that the conventional learning model is compared to the learning model individual as actor animation assisted edutainment. This makes researchers interested in researching the development of models individual as actor animation assisted edutainment in learning to write short stories. Learning model individual as actor This emphasizes the ability of students to organize the material studied in its final form (Budiningsih, 2005). Discovery by involving students actively in the mental process to find some concepts in the learning. The findings are made through observation, classification, measurement, prediction, and determination. While animation-assisted media edutainment is a learning process that is designed in such a way, so that educational and entertainment content can be combined harmoniously to create fun learning (Hamid, 2011). Edutainment seeks to teach or facilitate social interaction to students by including various lessons in writing short stories in the form of animation.

RESEARCH METHODS

This type of research is development

research or also called design research. This study aims to develop a product with validity, practicality, and effectiveness tests. Van Den Akker, (2010) state that development research is a systematic study to design, develop a product such as: programs, models, teaching materials, teaching and learning strategies, materials and so on, as well as a solution to answer questions. complex problems that occur. The product in this study is a model individual as actor animation assisted edutainment, quality, (valid, practical, and efficient). Model development individual as actor animation assisted edutainment, following a systematic process using modified development designs from Nieveen, et al (2010); Plomp (2013). That the research design consists of several stages, namely: 1) preliminary research (preliminary research); 2) prototype stage (phase prototyping); and 3) assessment stage (assessment phase). The product assessment stage is carried out using a semi-summative evaluation and is more directed towards testing the effectiveness of the research product (prototype 5) which is already valid and practical in its entirety in learning. Assessment phase is a step taken to assess the effectiveness of the learning model individual as actor during field testing (field test) which is applied to learning Indonesian in writing short stories. This research was conducted at SMKS APIPSU Medan and the object of the research were

students of class XI majoring in public administration (AP) I and II for six

meetings. The following Table details the research sample in the field test (field test).

Table 2. Details of field test research samples

Field test	Class	Amount	Major
Free test	Experiment (A1)	21	Public Administration (AP) 1
	Control (B1)	19	Public Administration (AP) 2
Post test	Experiment (A2)	21	Public Administration (AP) 1
	Control (B2)	19	Public Administration (AP) 2
Writing Analysis Results	Experiment (A)	21	Public Administration (AP) 1
Short Story	Control (B)	19	Public Administration (AP) 2

This research is to develop a product by testing the validity, practicality, and effectiveness. Data collection techniques used include interviews, observations, questionnaires, tests and literature review. Data analysis techniques then analyzed can be interpreted and interpreted against the product model individual as actor animation assisted edutainment resulting from. Data analysis techniques validity and practicality test (expert reviews, one-to-one evaluation, small group evaluation), Effectiveness test data analysis techniques (normality test, homogeneity test, test t (one-tailed test).

RESEARCH RESULTS AND DISCUSSION

Table 3. Results of Teacher Needs Data Analysis

No	Needs Analysis	Frequency	Percentage (%)
1	Very needed	11	23.91
2	Needed	25	54.35
3	Enough Needed	0	0.00
4	Less Needed	9	19.57
5	Not needed	1	2.17
Amount		46	100.00

From the results of the questionnaire above, most (50%) teachers need a learning model that can improve students' skills in writing short stories. However, only a small part in the results of the needs analysis is not needed by the teacher (2.17%). While the

3.1 Results of Preliminary Research Stages

3.1.1 Results of Needs and Context Analysis

Needs analysis on model development Individual as actor this is done in two steps, namely distributing needs analysis questionnaires for teachers, and distributing student needs analysis questionnaires. The following are the results of data analysis on the needs of teachers and students in Tables 2 and 3 Below.

analysis of student needs from 21 students in response to the questionnaire given. So that it can be recapitulated the results of the needs analysis can be seen in Table 4 below.

Table 4. Results of Data Analysis of Student Needs

No	Needs Analysis	Frequency	Percentage (%)
1	Very needed	7	18.42
2	Needed	8	21.05
3	Enough Needed	22	57.89

4	Less Needed	1	2.63
5	Not needed	0	0.00
Amount		38	100.00

Shows that of the 21 respondents who filled out the student needs questionnaire with 38 questions in the questionnaire, it can be seen that the needs analysis with the criteria is urgently needed amounted to 7 questionnaire items or 18.42%, then the needs analysis with the required criteria amounted to 8 questionnaire items or 21, 05%, and needs analysis with sufficient criteria needed amounted to 22 questionnaire questions or 57.89%. While the analysis of needs with the criteria of less needed and not needed amounted to 1 questionnaire item or only 2.63%.

3.1.2 Literature Review Results

Psychological theories in learning model individual as actor according to gestalt entered into the model individual as actor on short story learning. Model syntax individual as actor has 6 (six) syntaxes, namely: presenting problems, discussing problems individually or in groups, writing short story building frameworks, short story writing drafts, constructing short stories

and presenting student work. The social system formed in the model individual as actor is student-centered learning (student center). Model reaction principle individual as actor oriented to life skills in an environment and learning-based integrative. Model support system individual as actor in the form of product model books, teacher books and student books. Instructional system learning out comes on the model individual as actor are all learning materials (concepts) and methods tested in practice that are prepared to achieve goals in actual conditions.

3.2 Development Stage Results (Prototyping Phase)

3.2.1 Results of Initial Product Prototype Design

In this stage, the initial prototype consisted of three products made in this study, namely (a) individual model book as actor; (b) teacher's book; and (c) student books. The book cover design can be seen in the following Fig 1 below.



Figure 1. Initial design of research products

3.2.2 Formative Evaluation Results

The formative evaluation used in the development of the prototype refers to the formative evaluation of Tshannen (2007) which consists of self-evaluation, expert review, one to one evaluation, small group evaluation and field test.

Self-Evaluation Analysis Results

Obvious error or errors that appear on the

product are the first things to be evaluated after prototype 1 of the three types of product books that have been worked on and printed. The results of the self-evaluation analysis make the product rise to prototype level 2.

Validation Analysis Results (Expert Review)

The data from the validation test of prototype 2 are; model books, teacher books and student books can be seen in the following Table 5 below.

Table 5. Results of Analysis of Prototype Validation 2 Model Books

No	Assessment Aspect	Average	Percentage (%)	Interpretation
1	Book Format	4.08	81.67	Valid
2	Book Contents	4.23	84.67	Very Valid
3	Language	4.13	82.67	Very Valid
4	kegraphy kaan	4.30	86.00	Very Valid
5	Design	4.20	84.00	Very Valid
6	Content	4.10	82.00	Valid
7	Model Syntax	4.15	83.08	Valid
Total average		4.17	83.44	Valid

The results of the validity test of the model book prototype individual as actor in general, it has valid criteria with an average of 4.17 and the percentage of prototype

feasibility is 83.44%. The following results of the validation analysis of the prototype 2 teacher books can be seen in the following Table 6 below.

Table 6. Results of Teacher Book Prototype Validation Analysis

No	Assessment Aspect	Average	Percentage (%)	Interpretation
1	Content Eligibility	4,41	88,18	Very Valid
2	Language	4,37	87,33	Very Valid
3	Kegraphy	4,33	86,67	Very Valid
4	Design	3,93	78,67	Valid
5	Content	4,30	86,00	Very Valid
Total average		4,27	85,37	Very Valid

The results of the validation of the teacher's book prototype in general have very valid criteria with a validity percentage of 85.37% and have an average value of 4.27, referring to these results, the teacher's book has a

high feasibility to be used in research. The following are the results of the validation analysis of the prototype 2 student books, which can be seen in the Table 7 below.

Table 7. Results of the Prototype 2 Student Book Validation Analysis

No	Assessment Aspect	Average	Percentage (%)	Interpretation
1	Content Eligibility	4.08	81.52	Valid
2	Language	4.23	84.67	Very Valid
3	kegraphy kaan	4.17	83.33	Valid
4	Design	4.20	84.00	Valid
5	Content	4.13	82.67	Valid
Total average		4.16	83.24	Valid

The results of the validation of the prototype of 2 student books in general have valid criteria with a holistic average of 4.16 and a feasibility percentage of 83, 24%, so that in general the writing of sentences and the use of language in student books is feasible to use.

Individual Practicality Analysis Results (One to One Evaluation)

The individual practical test for prototype 3 involved 21 students. Data on the results of student assessment of the prototype 3 models individual as actor can be seen in the following Table 8 below.

Table 8. Results of Practical Analysis of Prototype 3

No	Average Score	Frequency	Percentage (%)	Interpretation
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1	X>4.2	3	50	Very Practical
2	X>3.4 - 4.2	3	50	Practical
3	X>2.6 - 3.4	0	0	Practical enough
4	X>1.8 - 2.6	0	0	Less Practical
5	X1.8	0	0	Not Practical
Amount		6	100	

The results of the practicality test of student assessment of the prototype 3 learning models individual as actor generally have practical criteria with a holistic average of 4.17. The percentage of practicality 50% of students rated Very Practical and 50% of students generally rated it as practical. This indicates that from the student's point of view the learning model individual as actor useful for making learning activities more interesting, increasing their ability, independence and activeness, as well as

sharpening their short story writing skills.

Results of Small Group Evaluation FGD Analysis

Analysis stage small group evaluation conducted through the Discussion Group Forum (FGD) online and offline, carried out by involving 14 participants Offline and On line using the instrument. The results of the practical analysis of prototype 4 through FGD are shown in the following Table 9 below.

Table 9. Results of Practical Analysis of Prototype 4 through FGD

No	Average Score	Frequency	Percentage (%)	Interpretation
1	X > 4,2	5	36	Very Pratical
2	X > 3,4 - 4,2	7	50	Pratical
3	X > 2,6 - 3,4	2	14	Pratical enough
4	X > 1,8 - 2,6	0	0	Less Pratical
5	X ≤ 1,8	0	0	Not Pratical
Amount		14	100	

Practical test results which explain that in general the prototype is 4 books individual as actor has practical criteria with a holistic average of 4.02 and a practicality percentage of 50%. Referring to these results, prototype 4 does not need to be revised again. To

find out users' views on the practicality of implementing the model individual as actor, there are data on teacher responses to practicality, application data can be seen in the following Table 10 below.

Table 10. Results of Model Practicality Test Individual as Actor Based on Teacher's Response.

No	Average Score	Frequenc y	Percentage (%)	Interpretation
1	X>4.2	1	20	Very Practical
2	X>3.4 - 4.2	3	60	Practical
3	X>2.6 - 3.4	1	20	Practical enough
4	X>1.8 - 2.6	0	0	Less Practical
5	X1.8	0	0	Not Practical
Amount		5	100	

The results of statistical data analysis of teacher responses to product practicality have practical criteria, with a holistic average of 3.92 and a practicality percentage of 60%. Referring to these results, prototype 4 does not need to be revised

again.

3.3 Results of the Assessment Stage (Assessment Phase)

Assessment phase is the stage carried out to assess the effectiveness of the individual

model as actor during field testing. The results of the comparison of the average value of skill achievement in writing short stories for the experimental and control classes are shown in the following Fig 2 below.

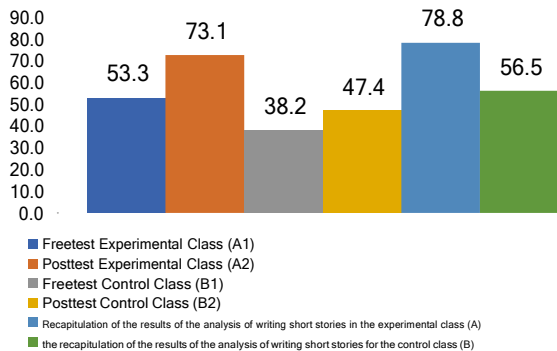


Figure 2. Comparison of skill achievement in writing short stories on experiment and control

The average value of learning outcomes to write short stories in the experimental class is higher than those using the conventional model (control class). The short story writing achievement data is then used in the prerequisite test to see the normality and homogeneity of the data group. The results of the data can be seen in the following Table 11 below.

Table 11. Normality Test Results of Short Story Writing Achievements

	Class	N	Mean	Alfa (5%)	Significant	Conclusion
Freetest	Experiment (A1)	21	53,33	0,05	0,196	Normal
	Control (B1)	19	38,16		0,597	Normal
Posttest	Experiment (A2)	21	73,1		0,374	Normal
	Control (B2)	19	47,73		0,586	Normal
Analysis Results Short Story	Experiment (A)	21	78,81	0,775	Normal	
	Control (B)	19	56,53	0,482	Normal	

The recapitulation of the results of the normality test shows that the distribution of the data on the achievement of skills in writing short stories in the experimental and control classes all have normal criteria with a significance level of 5%. The next

prerequisite test in this study is the homogeneity of variance test. The results of the homogeneity test of the variance of the achievement data can be seen in the following Table 12 below.

Table 12. Homogeneity Test Results for Writing Short Stories

	Experiment Class				Control Class		Recapitulation of Writing Analysis Results SHORT STORY
	Experiment Class		Control Class		Experiment Class (A)	Control Class (B)	
	Freetest (A1)	Posttest (A2)	Freetest (B1)	Posttest (B2)			
Amount	1120	1535	725	900	1655	1074	
Average	53.3	73.1	38.2	47.4	78.8	56.5	
Minimum	40	60	20	30	69	45	
Maximum	65	90	55	60	93	65	
Standard Deviation variance	6.0	6.8	11.8	8.7	6.7	6.0	
F count	1.29		1.83		1.24		

F Table	2.05	2.17	2.13
Conclusion	Homogeneous	Homogeneous	Homogeneous
Freetets and Posttets groups experimental and control classes as well as Recapitulation of Analysis Results Writing short stories, the experimental and control groups all showed results $F_{count} < F_{Table}$. The results of this analysis indicate that the data for all		groups from the experimental and control classes have a homogeneous data distribution with a significance level of 5%. Next, test the hypothesis using test analysis (one-sample tailed test), the data can be seen in the following Table 13 below.	

Table 13. Results of the t-test (one-tailed test) Writing short stories

Hypothesis	Test t (one-tailed test)		t	df	Sig. (2-tailed)
	95% Confidence Interval of the Difference				
	Lower	Upper			
Posttest Class Questions 1 Experiment - Freetest Class Questions Experiment	19,762	4,603 1.005 17,667 21.857	19,673	20	0.000
Posttest Class Questions 2 Control - Freetest Control Class Questions	9,211	8.210 1,883 5.254 13.167	4.890	18	0.000

Based on the results of test analysis one-tailed t test can be represented in the graph of acceptance H_0 as in the following Fig 3 below.

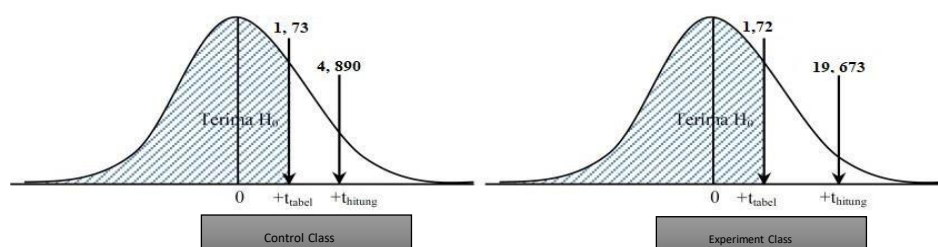


Figure 3. Graph of Acceptance of H_0 for Control and Experiment Class

The results of the research hypothesis test show that short story writing skills are outside the H_0 area of study. This indicates that in general the application of the learning model individual as actor better than the conventional model in improving short story writing skills.

3.4 Discussions

Discussion of Stage Results Preliminary Research

Among the data needed to design learning models individual as actor is the level of

ability to present problems, discuss problems individually or in groups, write short story building frameworks, draft short stories, construct short stories and present student work. These data were successfully obtained through the use of valid research instruments.

Discussion of Stage Results Prototyping

Product individual as actor through 4 stages of evaluation at this stage, namely: self-evaluation (self evaluation), expert review (validation from experts), one-to-one evaluation (individual practicality), and small group evaluation (small group practice).

Model individual as actor it is also considered to provide convenience for students and teachers in the learning process which increases understanding of the material as well as improves skills. This positive response from users makes a model individual as actor practical qualification. The researcher noted that during the trial activity, the user students seemed enthusiastic about carrying out step by step individual as actor.

Discussion of Stage Results Assessment Phase

The activities of all research results show that the learning model individual as actor developed is proven to be valid, practical and effective for use in schools. Learning model individual as actor proven to improve students' short story writing skills.

CONCLUSIONS

Learning model individual as actor developed has five components as its characteristics which consist of syntax, social system, reaction principle, support system and learning impact. Model syntax individual as actor there are six steps, namely presenting problems, discussing problems individually or in groups, writing short story builder frameworks, short story writing drafts, constructing short stories, presenting student work. Learning model individual as actor developed has a high level of validity and practicality. The level of model validity is viewed from the aspect of content, construction/graphics and language contained in the preparation of model books, teacher books and student books. The benchmark of model practicality individual as actor along with the support system in terms of convenience, benefits and attractiveness. All of these aspects are considered practical by users. Learning model individual as actor developed has a high level of effectiveness. The level of effectiveness is obtained by comparing the achievement of short story writing skills

between learning models individual as actor with conventional models. Achievement of short story writing skills learning by model individual as actor in the experimental class is better than the achievement of students who learn with the conventional model in the control class.

REFERENCE

1. Aji, B. S. (2011). Keefektifan Media Film Pendek Dalam Pembelajaran Menulis Cerpen pada Siswa Kelas X SMAN 1 Wadaslintang, Kecamatan Wadaslintang, Kabupaten Wonosobo. Yogyakarta: Universitas Negeri Yogyakarta.
2. Batubara, Ahmad Fadlan. (2013). Utilization of Comic Media to Improve Short Story Writing Skills for Class X Students of SMAN 2 Kabanjahe. Unimed Online Journal.
3. Basoz, T. & Cubukcu, F. (2014). The effectiveness of computer assisted instruction on vocabulary achievements. *Mevlana International Journal of education (MIJE)* Vol. 4(1), pp. 44-54.
4. Bello, S. (2016). Relationship between audio-visual materials and environmental factors on students academic performance in senior secondary schools in Borno State: Implications for Counseling, 7(24), 173-177.
5. Budiningsih, A. (2005). Study and Study. Jakarta: PT Rineka Cipta.
6. Chaudhari, P. (2013). Computer Assisted Instruction (CAI): Development of instructional strategy for biology teaching. UGC-JRF, Center of Advanced Study in Education, The Maharaja Sayajirao University of Baroda, Vadodara, India. ISSN: 2320-009X. Vol. 2, No. 1, pp. 106-116.
7. Gejel, J. (2012). Media-bed learning. *Sosu Media*, for EU LAB Learning 2012.

8. Hamid, D. (2011). *Educational Research Methods*. Bandung: Alfabeta.
9. Ikhwanuddin, N. (2015). *Methods of Increasing Knowledge of College Literature Tall. Proceedings for Optimizing Literature Learning in Schools*. North Sumatra Muhammadiyah University (UMSU).
10. Mathew, NG, & Alidmat, AOH (2013) *A study on the usefulness of audio visual aids in EFL Classroom: Implications for Effective Instruction*. *International Journal of Higher Education*, 2 (2), 86-92.
11. Nurhayati. (2011). *Improve Short Story Writing Skills By Playing Imagination and Mind Map for Class X Students of SMA Smart Ekselensia*. *Journal of Education*. Vol I No.3 pp. 245-261.
12. Nieven, N. (2010). *An Introduction to Educational Design Research*. Netherland: SLO Publications.
13. Plomp, T. (2013). "Educational Design Research: Part 2: How to conduct EDR". *Papers presented at the International Seminar & Workshop on Educational & Design Research*. Padang State University Postgraduate.
14. Rohman, S. (2012). *Introduction to Literary Teaching Methodology*. Yogyakarta: Ar-RuzzMedia.
15. Shabiralyani, G., Hasan, KS, Hamad, N., & Iqbal, N. (2015). *Impact of visual aids in enhancing the learning process case research: District Dera Ghazi Khan*. *Journal of Education and Practice*, 6 (19), pp. 226-233.
16. Tshannen-Moran., & Hoy, AW (2007). *The differential antecedents of self-efficacy beliefs of novice and experienced teachers*. *Teaching and Teacher Education*, 23, 944-956.
17. Van den Akker. J, E Kelly. Anthony, at all. (2010). *An Introduction to Educational Design Research*. *Proceedings of the seminar conducted at the East China Normal University*. Shanghi (PR China), November 23-26, 2007. AN: 7,5115,183. ISBN 97890. Netzoddruck, Enschede: Netherlands.