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Best Practices and Challenges of Outcomes Based Education (OBE) in Social Sciences Instruction of Junior High School Students in Jolo, Sulu

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ABSTRACT

Face with the demands of an ever changing global society, our country has in recent years made a shift in its educational landscape. Despite some doubts from the Filipino community, as early as June 2012 we have witness the nationwide implementation of K -12 curriculum in the basic education level as well as the payement of an outcomes based education for the tertiary level spearheaded by the Commission on Higher Education last 2014. Amidst these swift changes in our education system are the perceived challenges and measures of effectiveness in the implementation of the said programs especially the k - 12 curriculum which is by nature centers on an outcomes based instruction or result - oriented. Corollary to this, there is a present exigency to determine the outcomes based instruction employed by teachers in the high school, its effectives, and perceived challenges. In line with such objectives, this humble work aimed at determining the different strategies used by social sciences teachers at the Mindanao State University - Sulu and the Sulu College of Technology. It also distinguished the level of effectiveness of the OBE strategies in social sciences as perceived by social sciences teachers and students of the two well - known institutions in Sulu. Furthermore, the researcher also looked into the perceived challenges encountered by the respondents in their implementation of an outcomes based instruction.

1. Introduction

Over the years, the problem with poor quality of education in Sulu had sparked substantial debate on the kind of instruction junior high teachers should adopt. This has lead to the paradigm shift of the once teacher – centered teaching into student -centered or the outcomes – based education. Considering this inevitable and needed change, the researcher was driven to explore the best practices of OBE in social sciences instruction of junior High School students in Jolo, Sulu.

Generally, education is aimed at creating a teaching and learning environment that would bring about desired changes in learners, whether to be more knowledgeable, better skilled or to influence their attitudes and values positively while, the essence of teaching and learning is to plan teaching events (contents, strategies, activities & assessments measures) and to ascertain to what extent learners have acquired competencies.

Moreover, the achievement of successful learning outcomes depends on the execution of strategies and methodologies used by the teacher and in advancing the learning process, careful planning of different classroom activities must be present.

Malan (2008) has stipulated that in the recent decade, most of the school reform efforts aimed to improve teaching and learning, but there are huge differences in how they go about it. Some reforms, for example, attempted to improve all schools in a district, state or country at the same time. Other reforms attempted to influence the overall approach



to teaching and learning within a school, but do so one school at a time. Still others, focused on innovative curricula (e.g. science and mathematics), typically address one part of a school's program and aim for widespread implementation, while innovative approaches to instruction, such as cooperative learning, hope to change teachers' practices whether individually or altogether.

i"Uncertainty about the desired learning outcomes and failure to assess outcome properly could end in situation where learners only possess pseudo-knowledge, pseudo-skills, pseudo-attitudes, and pseudo-values. On completion of their studies these learners are awarded a certificate inherently implying that they have attained certain competencies whereas in fact they have not. Disenchantment with education in this regard is obvious- but not phenomenon". Malan (2008: 22)

The different educational institutions around the globe in the recent decade have already shifted its educational landscape from teacher-based instruction into what we presently refer to as OBE although historically, OBE is not entirely new as what often most people misconstrue.

Much is needed in determining the effects of OBE to learners performance is interpreting Criterion-referenced instruction and assessment because this criterion referenced instruction and assessment will serve as a tool in determining competencies in instruction as well as in assessment. It is based on attaining specified objectives and on testing for competence in terms of criterion stated in the objective.

With the implementation of K12 to basic education in the Philippines, education experts, advisers, and curriculum developers are now aligning the educational system in all levels toward an Outcomes-based instruction. However, many teachers and even instructors in the tertiary levels are still in the dark or unfamiliar with the type of instruction in lined with OBE. And still skeptics are currently questioning the effectiveness of such a shift especially in improving the quality of education among our Filipino students and graduates. Majority of them assert that changes should be made still in

the improvement of teachers and physical structures in their schools.

Best Practices of Outcomes Based Education (OBE) in Social Sciences Instruction of Junior High School Students in Jolo, Sulu

The present study showed that there are seven (7) Outcomes based strategies in teaching social sciences 'always' used by the Mindanao State University - Sulu Laboratory teachers ,while eight (8) were often employed by them.

Among that were always used by them are: 1. writing reaction and reflection papers on historical facts and current events, 2. Writing essays and journals about the significance of social events,3. Research work on debatable and explored issues in their community, 4. Making timelines when reporting in history, 5. Debates on issues of national and international policies, 6. Joining community involvement and Issue - awareness campaigns, and 7. Interviewing resource persons on important and new topics in class.

Moreover, the outcomes based strategies which have been often used by the Mindanao State University - Sulu Laboratory High School social sciences teachers are: 1. Assigns news and article reviews on unfolding local, national and international issues, 2. Forming concept maps and other Graphical organizers when presenting sociological Theories and the like, 3. producing collages and dioramas in presenting assigned reports and documentaries, 4. making leaflets, posters, and slogans on societal advocacies, 5. constructing maps for when presenting geographical locations and topics, 6. Role plays of historical figures as one of the Tasks in social sciences classes, 7. Simulations in aiding and in learning Social sciences topics, and 8. News reporting of the latest and significant current events.

Furthermore, this implies that the social sciences teachers of the Mindanao State University – Sulu have realistically implemented outcomes based instruction in their classes.

The study also depicted that the Sulu College of Technology have 'often' used the at least 5 outcomes based strategies in Social Sciences such as: 1.forming



concept maps and other Graphical organizers when presenting sociological Theories and the like, 2. making leaflets, posters, and slogans on societal advocacies, 3. construct maps for when presenting geographical locations and topics, 4. Engaging in debates on issues of national and international policies, and 5. joining community involvement and Issue - awareness campaigns.

Whereas, ten (10) Outcomes based instruction in social sciences were sometimes used by Sulu College of Technology Social Sciences Teachers; namely: 1. Writing reaction and reflection papers on historical facts and current events, 2. Assigning news and article reviews on unfolding local, national and international issues, 3. Writing essays and journals about the significance of social events, 4. producing collages and dioramas in presenting our assigned reports and documentaries, 5. research work on debatable and explored issues in their community, 6. Making timelines when reporting in history, 7. Role plays of historical figures as one of the Tasks in social sciences classes, 8. using simulations in aiding us, students, in learning Social sciences topics, 9. Undertaking news reporting of the latest and significant current events, and 10. Encouraging us to interview resource persons on important and new topics in class.

Hence, Sulu College of Technology Social Sciences Teachers/ instructors did not always utilized outcomes based instruction in their classes.

The level of effectiveness of OBE instruction in social sciences

The identification of outcomes based strategies in social sciences used by teachers of the MSU-Sulu LHS and SCT only gave a limited insight as to whether or not such strategies are effective. Hence, the level of effectiveness of Outcomes Based Education Strategies in social sciences were determined.

It was found out that not all of the Outcomes based strategies in social sciences used by the teachers of the Mindanao State University – Sulu were considered to be effective by the respondents. Only seven (7) were considered as 'Slightly Effective', while six (6) were cited as 'less effective'.

Among the Outcomes – Based Strategies in Social Sciences which are considered as slightly effective are: 1. Writing news articles and reviews, 2. Writing reaction/reflection papers, 3. Creating journals and essays, 4. Conducting research, 5. Role playing and simulations, 6. Power point and multimedia presentations, and 7. Argumentation and Debates.

Moreover, the six (6) outcomes – based strategies in social sciences which are 'less effective' are: 1. Using concept maps and graphic Organizers, 2. Producing collages and dioramas, 3. Making of leaflets, posters and slogans, 4. Constructing maps and timelines, 5. Involvement in issue awareness campaigns, and 6. Interviews and surveys.

On the other hand, most of the outcomes based strategies are confirmed to be *moderately effective* by Sulu College of Technology social sciences teachers such as:1. Using concept maps and graphic Organizers, 2. Writing news articles and reviews, 3.Writing reaction/reflection papers, 4. Creating journals and essays, 5. Making of leaflets, posters and slogans, 6. Constructing maps and timelines, 7. Conducting research, 8. Involvement in issue awareness campaigns, 9. Role playing and simulations, 10. Power point and multimedia Presentations, 11.Interviews and surveys, and 12.Argumentation and Debates.

However, one (1) strategy which the respondents have cited as *slightly effective* which is Producing collages and dioramas.

The Challenges for OBE in social sciences instruction of grade 10 studentsof MSU – Sulu LHS

There are ample studies which asserted that outcomes – based instruction has been instrumental to the enhancement of the quality education of students. However certain challenges are also perceived to have influenced the success of execution of such programs, just like the outcomes – based instruction in social sciences. Hence, the challenges encountered by the Mindanao State University – Sulu Social Sciences teachers in the implementation of outcomes based education were also distinguished.



The study revealed that MSU-Sulu LHS respondents were not sure whether the following are challenges to outcomes based instruction: 1. The school does not have the necessary facilities and equipment for the honest implementation of Outcomes - based education, 2. Majority of the teachers lack the needed trainings and seminars on OBE, 3. Many of the teachers do not possess ample knowledge on the approaches, methods, and techniques used in OBE, 4. A lot of teachers still favors the teacher - centered and teacher dominated instruction, 5. Many teachers perceive OBE as very tasking, complex, and difficult to apply, 6. OBE is seen as less effective compared to the previous curriculum in achieving quality education, 7. Teacher, specially seniors, do not want to change their traditional teaching approaches, methodologies and techniques, 8. Teachers cannot find ample course materials, books, and other references that are Outcomes - based, 9. Teachers revealed that Students are not responsive to OBE Instruction,

10. There is a lack of financial support and mandate from the administrators in the implementation of OBE, 11. Teachers believe that OBE takes away a lot of instruction time that is most important to cover the curriculum content, 12. Teachers assert that only a few topics will be covered with OBE and hampers the students' mastery of subject – matter, and 13. Teachers consider subject centered approach is far effective in teaching students than OBE.

On the other hand, generally the respondents agreed that most of the Mindanao State University – Sulu Science teachers have little background on Outcomes – based assessment; while, they have disagreed that, students find the OBE activities and assessment difficult and vague

The respondents of Sulu College of Technology all disagreed with the challenges to OBE instruction as cited and enumerated to them. This means that their implementation of the outcomes based instruction in social sciences subjects/ courses smoothly implemented.

Table 1. Outcomes based education (OBE) in social sciences instruction of junior high school students in MSU-Sulu laboratory high school (LHS)

	OBE Best Practices					MEAN	Interpretation
a. Writ	ten output						
1.	Our teacher requires us writing reaction and reflection papers on historical facts and current events	10	22	5	0	3.13	Always
2.	Our teacher assigns news and article reviews on unfolding local, national and international issues.	8	13	16	0	2.78	Often
3.	Our teacher also makes us write essays and journals about the significance of social events.	at the 13 16 8				3.13	Always
4.	Our teacher assigns us to form concept maps and other Graphical organizers when presenting sociological Theories and the like.	6	20	11	0	2.86	Often
b. Proc	lucts	10	15	8	4	2.83	Often
5.	We produce collages and dioramas in presenting our assigned reports and documentaries						
6.	We make leaflets, posters, and slogans on societal advocacies	7	17	10	2	2.72	Often
7.	We write research work on debatable and explored issues in their community	15	13	9	1	3.18	Always
8.	We make timelines when reporting in history	15	12	7	3	3.05	Always
9.	We construct maps for when presenting geographical locations and topics	6	16	12	2	2.64	Often
c. Perfe	ormance – Based Tasks						
10.	My teacher includes role plays of historical figures as one of the Tasks in social sciences classes	12	12	10	3	2.89	Often
11.	My teacher use simulations in aiding us, students, in learning Social sciences topics	9	16	12	0	2.91	Often
12.	We engage in debates on issues of national and international policies	12	17	5	3	3.02	Always
13.	13.My teacher asks us to join community involvement and Issue - awareness campaigns	15	11	7	4	3.0	Always
14.	14.My teacher encourage us to interview resource persons on important and new topics in class	12	14	9	4	3.02	Always
15.	15 My teacher make us undertake news reporting of the latest and significant current events	5	16	16	0	2.70	Often



Table 2. Outcomes based education (OBE) in social sciences instruction of junior high school students in Sulu college of technology (SCT)

	OBE Best Practices					MEAN	Interpretation
a. Writ	ten output						
1.	Our teacher requires us writing reaction and reflection papers on historical facts and current events	2	10	10	4	1.83	Sometimes
2.	Our teacher assigns news and article reviews on unfolding local, national and international issues.	1	5	15	4	1.94	Sometimes
3.	Our teacher also makes us write essays and journals about the significance of social events.	2	9	10	4	1.78	Sometimes
4.	Our teacher assigns us to form concept maps and other Graphical organizers when presenting sociological Theories and the like	0	7	5	12	2.08	Often
b. Proc	lucts						
5.	We produce collages and dioramas in presenting our assigned reports and documentaries	2	8	11	5	1.91	Sometimes
6.	We make leaflets, posters, and slogans on societal advocacies	3	3	12	8	2.08	Often
7.	We write research work on debatable and explored issues in their community	2	11	9	3	1.70	Sometimes
8.	We make timelines when reporting in history	3	8	12	3	1.81	Sometimes
9.	We construct maps for when presenting geographical locations and topics	1	8	5	12	2.16	Often
c. Perfe	ormance – Based Tasks						
10.	My teacher includes role plays of historical figures as one of the Tasks in social sciences classes	9	11	5	2	1.45	Sometimes
11.	My teacher use simulations in aiding us, students, in learning Social sciences topics	7	7	5	8	1.83	Sometimes
12.	We engage in debates on issues of national and international policies	0	11	6	9	2.05	Often
13.	My teacher asks us to join community involvement and Issue - awareness campaigns	0	9	4	13	2.21	Often
14.	My teacher encourage us to interview resource persons on important and new topics in class	7	7	7	5	1.67	Sometimes
15.	My teacher make us undertake news reporting of the latest and significant current events	2	9	6	9	2.0	Sometimes

Table 3. Effectiveness of OBE instruction in social sciences of MSU-Sulu laboratory high school

OBE	Strategies	NE	LE	SE	ME	VE	Mean	Interpretation
1.	Using concept maps and graphic Organizers.	3	1	12	4	6	2.35	Less Effective
2.	Writing news articles and reviews.	1	1	8	7	9	2.70	Slightly Effective
3.	Writing reaction/reflection papers.	0	4	7	9	6	2.56	Slightly Effective
4.	Creating journals and essays.	1	1	6	10	8	2.72	Slightly Effective
5.	Producing collages and dioramas.	2	3	13	5	3	2.21	Less Effective
6.	Making of leaflets, posters and slogans	2	4	6	10	4	2.37	Less Effective
7.	Constructing maps and timelines	2	3	8	8	4	2.27	Less Effective
8.	Conducting research	2	0	3	8	13	2.94	Slightly Effective
9.	Involvement in issue awareness campaigns	2	2	9	7	6	2.45	Less Effective
10.	Role playing and simulations	1	1	4	5	15	2.97	Slightly Effective
11.	Power point and multimedia Presentations	2	0	7	4	12	2.67	Slightly Effective
12.	Interviews and surveys	4	3	6	8	5	2.29	Less Effective
13.	Argumentation and Debates	2	2	8	7	7	2.51	Slightly Effective



Table 4. Effectiveness of OBE instruction in social sciences of sulu college of technology (SCT)

OBE S	Strategies	NE	LE	SE	ME	VE	Mean	Interpretation
1.	Using concept maps and graphic Organizers.	0	2	3	17	13	3.94	Moderately Effective
2.	Writing news articles and reviews.	0	4	5	16	10	3.70	Moderately Effective
3.	Writing reaction/reflection papers.	0	0	8	14	13	3.91	Moderately Effective
4.	Creating journals and essays.	2	2	10	11	12	3.78	Moderately Effective
5.	Producing collages and dioramas.	2	1	9	15	7	3.40	Slightly Effective
6.	Making of leaflets, posters and slogans	0	1	9	14	11	3.78	Moderately Effectiv
7.	Constructing maps and timelines	2	2	9	9	13	3.62	Moderately Effectiv
8.	Conducting research	1	0	1	10	22	4.16	Moderately Effectiv
9.	Involvement in issue awareness campaigns	0	0	9	13	13	3.89	Moderately Effectiv
10.	Role playing and simulations	0	2	7	14	12	3.81	Moderately Effectiv
11.	Power point and multimedia	1	1	7	6	20	4.0	Moderately Effectiv
12.	Presentations	1	1	′	U	20	7.0	Moderatery Effective
13.	Interviews and surveys	0	4	4	17	9	3.59	Moderately Effectiv
14.	Argumentation and Debates	1	2	8	14	10	3.59	Moderately Effectiv

Table 5. Challenges encountered by MSU-Sulu LHS social sciences teachers in OBE instruction

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1.	The school does not have the necessary facilities and equipment for the honest implementation of Outcomes – based education	6	10	11	9	2	2.83	Not Sure
2.	Majority of the teachers lack the needed trainings and seminars on OBE	4	11	10	9	3	2.89	Not Sure
3.	Many of the teachers do not possess ample knowledge on the approaches, methods, and techniques used in OBE	8	4	14	7	2	2.59	Not Sure
4.	Most of teachers have little background on Outcomes – based assessment	1	4	5	22	4	3.56	Agree
5.	A lot of teachers still favors the teacher - centered and teacher dominated instruction	4	5	11	14	2	3.05	Not Sure
6.	Many teachers perceive OBE as very tasking, complex, and difficult to apply	2	5	15	13	2	3.21	Not Sure
7.	OBE is seen as less effective compared to the previous curriculum in achieving quality education	4	8	7	13	5	3.18	Not Sure
8.	Teacher, specially seniors, do not want to change their traditional teaching approaches, methodologies and techniques	3	10	13	4	5	2.78	Not Sure
9.	Teachers cannot find ample course materials, books, and other references that are Outcomes – based	5	10	14	5	3	2.75	Not Sure
10.	Teachers confirm that students find the OBE activities and assessment difficult and vague	0	6	8	8	3	2.24	Disagree
11.	Teachers revealed that Students are not responsive to OBE Instruction	3	5	15	11	3	3.16	Not Sure
12.	There is a lack of financial support and mandate from the administrators in the implementation of \ensuremath{OBE}	6	3	18	5	5	3.0	Not Sure
13.	Teachers believe that OBE takes away a lot of instruction time that is most important to cover the curriculum content	0	3	9	16	6	3.43	Not Sure
14.	Teachers assert that only a few topics will be covered with OBE and hampers the students mastery of subject – matter	1	3	12	19	1	3.35	Not Sure
15.	Teachers consider subject centered approach is far effective in teaching students than OBE	2	6	7	15	5	3.13	Not Sure



Table 6. Challenges encountered by SCT social sciences teachers in OBE instruction

	Items	SD	D	NS	A	SA	Mean	Interpretation
1.	The school does not have the necessary facilities and equipment for the honest implementation of Outcomes – based education	5	5	8	6	2	1.97	Disagree
2.	Majority of the teachers lack the needed trainings and seminars on OBE	2	9	11	1	3	1.94	Disagree
3.	Many of the teachers do not possess ample knowledge on the approaches, methods, and techniques used in OBE	4	6	12	3	1	1.84	Disagree
4.	Most of teachers have little background on Outcomes – based assessment	1	5	14	4	2	2.13	Disagree
5.	A lot of teachers still favors the teacher – centered and teacher dominated instruction	3	2	14	6	1	2.10	Disagree
6.	Many teachers perceive OBE as very tasking, complex, and difficult to apply	1	3	17	2	3	2.18	Disagree
7.	OBE is seen as less effective compared to theprevious curriculum in achieving quality education	4	4	14	2	2	1.94	Disagree
8.	Teacher, specially seniors, do not want to change their traditional teaching approaches, methodologies and techniques	2	2	6	13	3	2.45	Disagree
9.	Teachers cannot find ample course materials, books, and other references that are Outcomes – based	0	6	10	5	0	1.67	Disagree
10.	Teachers confirm that students find the OBE activities and assessment difficult and vague	1	9	10	5	0	1.86	Disagree
11.	Teachers revealed that Students are not responsive to OBE Instruction	3	7	15	1	0	1.78	Disagree
12.	There is a lack of financial support and mandate from the administrators in the implementation of OBE	0	4	7	12	3	2.48	Disagree
13.	Teachers believe that OBE takes away a lot of instruction time that is most important to cover the curriculum content	2	5	14	3	2	2.05	Disagree
14.	Teachers assert that only a few topics will be covered with OBE and hampers the students mastery of subject – matter	0	8	15	3	0	1.97	Disagree
15.	Teachers consider subject centered approach is far effective in teaching students than OBE	2	4	15	5	0	2.02	Disagree

2. Conclusion

The condition for an outcomes based approach to social sciences instruction is undeniably very strong. This has been seen in the recent past with the paradigm shift in Education following the implementation of the K -12 curriculum, the senior high school program and the new general education curriculum at the tertiary level. The rapid changes

brought about by globalization have stressed the paradigm shift in Philippine Educational setting to lifelong learning and from merely transmission of expert knowledge to building learner competencies.

Nonetheless, such educational reforms aimed at enabling learners to develop various knowledge, competencies, and expertise in both the social and economic realms. Hence, learning has been viewed as



demonstration of what learners know, can do and can be. Therefore, teaching whether in the basic or higher education should be 'Outcomes Based' or result – oriented.

Upon determining the outcomes based instruction in social sciences in the Mindanao State University – Sulu Laboratory High School and the Sulu College of Technology, the researcher also looked into the effectiveness of outcomes based education in social sciences and the perceived challenges encountered by social science teachers in both said institutions.

Apparently it was concluded that the Mindanao State University – Sulu Laboratory High School Social Sciences teachers and students had been mostly using Outcomes based strategies in teaching social sciences while, Out of the thirteen (13) enumerated Outcomes based strategies, only seven (7) were found to be 'Slightly Effective', while the remaining six (6) were cited as 'less effective' by the respondents.

In addition to this, respondents of Mindanao State University - Sulu Laboratory High School were generally 'not sure' of the perceived challenges in the Outcomes - based Education implementation. This meant that either they do not perceive the said challenges as a problem or they simply do not know if it is a problem or not. They however, agreed that most of the teachers have little background on Outcomes - based assessment and disagreed that, students find the OBE activities and assessment difficult and vague. Hence, the real challenge is the lack of needed trainings especially on outcomes based assessment for teachers in the Mindanao State University - Sulu laboratory High School and not the readiness or efficiency of the students to undergo outcomes based assessment.

In contrast, the respondents of the Sulu College of Technology disclosed that they have 'often' used the at least five (5) outcomes based strategies in Social Sciences. Whereas, ten (10) Outcomes based instruction in social sciences were 'sometimes' employed in their teaching. Generally, it could be construed that unlike Mindanao State University – Sulu Social Science Teachers, the Sulu College of Technology Social Sciences Teachers do not always

utilized outcomes based instruction in social sciences subjects/courses.

Aside from this, the Sulu College of Technology respondents indicated that most of the outcomes based strategies *moderately effective*, except for 1 (one) strategy which the respondents have cited as *slightly effective* and that is Producing collages and dioramas.

It was determined too, that the respondents of Sulu College of Technology unanimously disagreed with all the perceived challenges to Outcomes based instruction. It means that they have no problems at all with the implementation of outcomes based education in social sciences whether it is in connection with the needed facilities, faculty and student trainings, and other administrative and support systems.

Lastly, the researcher stressed the need to include an outcomes based assessment and additional trainings and information drive should be developed and initiated by concern administrators, principals, and school heads in order to aid teachers in their implementation of outcomes based instruction as well as provide the necessary facilities and equipment for effective implementation of outcomes-based education. Teachers must also be opened to the possibilities of seeing new education curriculum such as this OBE as expanded opportunities and as alternative teaching approach to improve student learning and recognize the demand of OBE in the current educational system.

3. References

Brandt, R, S., Ed. Cooperative Learning and the... ED 345 753 Trends in Educational Technology

Calderon, J.F. and E.C. Gonzales. 1993. Methods of Research and Thesis Writing. Manila.

Claassen, C. South African Journal of Higher Education, v 12 n2 p34-40 1998.

Giron, Paraluman R. Outcomes of Language Teaching in K to 12, K to 12 ed. Publisher: Quezon City. Vibal Group, (2013), c 2013



- Glasser, R. (ed) 1983. "Cognitive and Motivational Aspects of Instruction: Selected International Congress Papers". Amsterdam: Elsevier.
- Mager, R. (1962). Preparing Instructional Objectives Palo Alto, Calif.: Feoron Publishers.
- Malan, S.P.T.: "the new Paradigm' of Outcomes-Based Education in Perspective. The Journal of Family Ecology and Consumer Sciences 28 (2000) Google Scholar
- Nicholson, T. "The Development and Teaching of Word Recognition Skill". Journal of Educational Psychology 89 (2), 276, 1997.
- Spady, W.: Outcome-Based Instructional Management. The Australian Journal of Education 26 (6), (1982). Google Scholar
- Teston-Llagas, Avelina (2004). Becoming a Professional Teacher. Cubao, Quezon City: Lorimar Publishing Co., Inc.
- Wiggins, G. and McTighe, J., 2005. Understanding by Design, Expanded 2nd edition. Alexandria: ASCD.

