Open Science

Teachers' perception of authentic assessment techniques practice in social studies lessons in senior high schools in Ghana

Boadu Kankam[1], Anthony Bordoh[2, *], Isaac Eshun[2], Thoephilus Kweku Bassaw[3], Fredrick Yaw Korang[4]

[1]Department of Art and Social Sciences Education, University of Cape Coast, Cape Coast, Ghana
[2]Department of Art and Social Sciences, Enchi College of Education, Enchi, Ghana
[3]Department of Art and Social Sciences, Komenda College of Education, Komenda, Ghana
[4]Social Science Department, Winneba Senior High School, Winneba, Ghana

Email address

bordohlity@yahoo.co.uk (A. Bordoh)

Abstract

The study sought to find out teachers' perception of authentic assessment techniques practice in Social Studies lessons in Senior High Schools (SHSs) in Ghana. The study used a descriptive case study design. A sample of twenty (20) teachers and ten (10) senior high schools were selected for the study. Semi structured interview was the main instruments used for data collection. The results indicated that authentic assessment, as a classroom assessment strategy, does have a place in SHSs in the Central Region of Ghana. The teachers in this study perceived that the form of authentic assessment used in their classrooms was limited by policies, time, resources and assessment methods employed by their schools. These policies affect their use of this assessment method because the subject is a core in the SHS. Regular in-service training and capacity building workshops on classroom assessment should be organized for these SHS teachers to improve their use of assessment as a tool to enhance teaching and learning.

Keywords

Assessment, Perception of Authentic Assessment, Authentic Assessment Techniques,
Authentic Assessment in Social Studies, Senior High Schools

1. Introduction and Background

Assessment is central to teaching and learning. Assessment information is needed to make informed decisions regarding students' learning abilities, their placement in appropriate levels and their achievement. According to Sadler (2009), "assessment refers to the making of evaluation on students' overall performance and generating assumptions regarding their learning and production education-wise, which include the quality or achievement in tasks such as tests, projects, reports and examinations". Authentic Assessment has emerged out of this criticism with the promise that assessment can be constructed so as to further both learning and teaching. The criticism has substance. For example

Social Studies assessment in Ghana is dominated by traditional testing from the classroom to the national level. Analysis has been largely uncritical, however, and the emphasis on authentic outcomes poses problems as well as solutions.

Assessment continues to be at the center of a lively debate taking place in educational reform. The measure of student learning, whether the assessment is standardized or alternative, inevitably includes theories, techniques, practices, applications and outcomes (Greenstein, 2004). The argument for assessment, as a measure of educational outcomes, is that it is expected to improve teaching and learning, and

contribute to overall school improvement (Greenstein, 2004). Wiggins (1998) argued that the aim or purpose of assessment is primarily to educate and improve student performance, not to audit it. Schools tend to focus on teaching students to pass simplistic, multiple-choice tests that neither assesses what we neither value nor provide feedback about how to teach and how to learn. The tendency is to sacrifice what we truly want to assess and settle for score accuracy and efficiency. Assessment tasks need to reflect actual teaching and learning processes and not the mechanistic approach that if you improve the test, you improve the teaching (Cumming & Maxwell, 1999).

Furthermore, Boud and Falchikov (2005) suggest that educators need to move from traditional (paper and pencil) assessment that focuses on specifics, standards and immediate outcomes to more sustainable assessment that can aid students to become more active learners not only in managing their own learning but also assessing themselves to life beyond the end of the course. They added that there has been considerable critique of both the inadequacy of current assessment practices by classroom teachers and external examination. Pellegrino, Chudowsky and Glaser (2001) assert that authentic assessments provide multiple paths to demonstration of learning in comparison to traditional assessments like answering multiple-choice questions that lack variability, owing to students' ability to demonstrate knowledge and skills they possess. Authentic tasks tend to provide more freedom to demonstrate their competencies, for example, business proposals, projects, portfolios, artwork and videos, among other tangible products, (Craddock & Mathias, 2009).

The primary purpose is to help young people develop the ability to make informed and reasoned decisions for the public good as citizens of a culturally diverse, democratic society in an interdependent world. An outcome-based approach requires that we test in authentic ways what is considered to be most important in terms of knowledge, skill, values, and attitudes. Thus, if critical thinking, problem solving, positive attitudes and values, analytical skills and civic competence are highly valued, and then students should be able to demonstrate mastery of these through worthwhile activities which meet the demands and expectations of the society. Hence the need to employ authentic assessment in our various classrooms depends greatly how teachers perceive authentic assessment.

In addition, Stanford, Pokey, Reeves and Stacy (2005) are appealing to teachers already burdened by constraints of time and standards, but unable to measure learners' attitudes and values, which is the hallmark of Social Studies education. Social studies educators should embrace authentic assessment for its ability to assess critical and analytical thinking skills, problem solving, positive attitudes and values. Using multiple-choice tests consistently tends to benefit some students and not others (Sternberg, 2007). Therefore, if teachers want more students' information to guide daily instruction, to engage all learners, they will have to test in a different manner. "Expanding the repertoire of assessment strategies will help teachers meet the needs of every learner in the classroom" (Stanford, Pokey Reeves, & Stacy 2005)

However, as far as can it be determined, there is no much research on Social Studies teachers' perception of authentic assessment in Senior High Schools (SHSs) in Ghana. Also, relevant literature suggests that there are not much formal authentic assessment training programmes for Social Studies teachers in the Ghanaian educational context. The purpose of this study was to examine the perceptions of teachers about the use of authentic assessment techniques in assessing students learning outcomes in Social Studies. The research is to answer the question: what are the perceptions of SHS Social Studies teachers about the use of authentic assessment techniques in assessing students learning outcomes in Social Studies?

2. Literature Review on Authentic Assessment Techniques Used in Classrooms

According to Simonson, Smaldino, Albright and Zvacek (2000), there are three approaches in authentic assessment: Alternative assessment, performance-based assessment, and constructivist assessment. Similarly, Reeves (2000) suggests three main strategies to integrate authentic assessment into classroom settings: 1. cognitive assessment, 2. alternative assessment, 3. portfolio assessment. Researchers and educators use the term performance-based, alternative, and authentic assessment interchangeably. As Wangsatorntanakhun (1997) states the term, authentic assessment, embraces both alternative and performance-based assessment. There are two major concepts that describe authentic assessment:

1. Performance: A student's active generation of a response that is observable either directly or indirectly via a permanent product.

2. Authentic: The nature of the task and context in which the assessment occurs is relevant and represents "real world" problems or issues (Elliott, 1995).

Authentic assessment aims to relate instruction to the real-world experience of the learners. The task needs to be meaningful in order to be authentic (Simonson et al. 2000). Winking (1997) also points out the role of authenticity and states that authentic assessments require higher order thinking skills so that students can solve real-life related problems. Finally, Bailey (1998) relates the power of the performance tests are not only to their authenticity, but also to their direct and highly contextualized nature.

In order to increase the effectiveness of authentic assessment, instructors need to pay attention to the following points (Elliott, 1995:48):

1. Selecting assessment tasks that are clearly aligned or connected to what has been taught.

2. Sharing the scoring criteria for the assessment task with students prior to working on the task.

3. Providing students with clear statements of standards

and/or several models of acceptable performances before they attempt a task.

4. Encouraging students to complete self-assessments of their performances.

5. Interpreting students' performances by comparing them to standards that are developmentally

appropriate, as well as to other students' performances in the classroom.

Authentic assessment strategies include portfolios, open questions, exhibits, demonstrations, hands-on execution of experiments, self assessment and computer simulations (Dietel, Herman, & Knuth, 1991). The most common authentic assessment tools are; performance assessment, portfolios, self assessment, peer assessment, alternative assessment, authentic pedagogy, authentic learning and projects. These are discussed below.

Performance-based assessments (PBA), also known as project-based is generally used as a summative evaluation strategy to capture not only what students know about a topic, but if they have the skills to apply that knowledge in a "real-world" situation. By asking them to create an end product, PBA pushes students to synthesize their knowledge and apply their skills to a potentially unfamiliar set of circumstances that is likely to occur beyond the confines of a controlled classroom setting (Palm, 2008). Some examples of PBA include designing and constructing a model, developing, conducting and reporting on a survey, carrying out a science experiment, writing a letter to the editor of a newspaper, creating and testing a computer program, and outlining, researching and writing an in-depth report (Darling-Hammond & Pecheone, 2009; Wren, 2009). Regardless of the type of performance, the common denominator across all PBAs is that students are asked to perform an authentic task that simulates a real life experience and mimics real world challenges (Wiggins & McTighe, 2005).

According to Bekoe, Eshun and Bordoh (2013 as cited in Eshun, Bordoh, Bassaw & Mensah, 2014) knowledge is constructed during the learning process and that a student discovers knowledge for him/herself, rather than receiving knowledge, and this inspires the notion of performance-based assessment. PBA, used as authentic assessment, also provides more timely feedback than large-scale standardized tests. Standardized tests can take a number of months to produce results, but PBA allows teachers to make meaningful adjustments while they are still teaching their current students. PBA also allows for differentiation of assessment so that all students have space to demonstrate understanding including special education and Social Studies students (Darling-Hammond & Pecheone, 2009). PBA, coupled with a well-designed measurement tool such as a scoring rubric, can provide the 'how' and the 'why' a student might be struggling, versus just the 'what' of standardized tests; as a result, PBA can actually help teachers figure out how their students best learn (Shepard, 2009).

In addition to impacts on student outcomes, research has shown that the implementation of performance-based assessment strategies can also impact other instructional strategies in the classroom. (Firestone, Mayrowetz, & Fairman, 1998: 11).This shows that student's performance based assessment is relevant in portfolio.

Bekoe et al., (2013). Asserted that portfolio assessment is on-going comprehensive collection of students work and getting to know where they are, in terms of performance….. It increases their involvement in formative assessment. Portfolios are one of the most flexible forms of assessment because they can be effectively adapted across subject areas, grade levels and administrative contexts (i.e. to report individual student progress, to compare achievement across classroom or schools and to increase parent involvement in student learning) (National Research Council, 2002). The content included in the portfolio, along with who chooses what to include, vary by the teacher and the learning goals associated with the portfolio. Some portfolios only include final products, while other portfolios will incorporate drafts and other process documents. Some will contain items chosen exclusively by the teacher, while others will fold in input from the student, their peers, administrators and even parents.

One of the strengths of the portfolio as an assessment tool is that it can be smoothly integrated into classroom instruction (as opposed to be an add-on style of the standardized summative test). The portfolio acts as a repository for work assigned and completed throughout the year. It does not necessitate additional tests or writing assignments. The additional inputs required (i.e. student reflection (written or spoken), student-teacher collaboration, rubric creation and implementation) aid rather than distract from the teaching and learning process. Barootchi and Keshavarz (2002:286) highlighted that the student portfolio is an assessment that is "truly congruent with instruction" because of its ability to simultaneously teach and test. In fact, when implemented effectively, portfolios can supplement rather then take time away from instruction (National Research Council, 2002). When the portfolio is well integrated into a teacher's instructional practices, it can function as a strategy to increase student learning across a variety of subject areas. They also eliminate the space a limitation normally associated with paper portfolios and enhances self-assessment.

While the assessment tools and strategies above generally function as summative approaches, self-assessment is generally viewed as an authentic assessment strategy, rather than one used to determine a student's final grade. Its main purpose is for students to identify their own strengths and weakness and to work to make improvements to meet specific criteria (Andrade & Valtcheva, 2009). According to McMillan and Hearn (2008:1) "self-assessment occurs when students judge their own work to improve performance as they identify discrepancies between current and desired performance". In this way, self-assessment aligns well with standards-based education because it provides clear targets and specific criteria against which students or teachers can measure learning.

Self-assessment motivates learners to assess their own

performance….self- assessment therefore is a valuable tool for formative purpose (Bekoe et al, 2013). Ross (2006:5) argues that in order for self-assessment to be truly effective four conditions must be in place: the self-assessment criteria is negotiated between teachers and students, students are taught how to apply the criteria, students receive feedback on their self-assessments and teachers help students use assessment data to develop an action plan. A number of studies point to the positive effects self-assessment can have on achievement, motivation, self-perception, attitudes and values (Andrade & Valtcheva, 2009). However McDonald and Boud (2003) report those high school students who were trained in self-assessment not only felt better prepared for their external examinations; they actually outperformed than their peers who had not received the training. Similarly, students across grade levels and subject areas including narrative writing, mathematics and geography outperformed their peers in the control group who had not received self-assessment training (Ross, 2006). Andrade and Valtcheva (2009) in their literature reviews cite numerous studies that found a positive relationship between the use of self-assessments and the quality of writing, depth of communication skills, level of engagement and degree of learner autonomy. Finally, self-assessment is also a lifelong learning skill that is essential outside of the confines of the school or classroom (McDonald and Boud, 2003).

An additional strength of self-assessment as authentic assessment tool is that it allows every student to get feedback on his or her work. Few classrooms allow teachers the luxury of regularly responding to each individual student, so when students are trained in self-assessment it makes them less reliant on teachers to advance their learning (Andrade and Valtcheva, 2009). While the focus is self-evaluation, the process can also be enhanced through peer and teacher based assessments that offer alternative interpretation and additional evidence to support a student's understanding of their own learning (Andrade and Valtecheva, 2009). A number of channels can be used to aid students in their self-assessment including journals, checklists, rubrics, questionnaires, interviews and student-teacher conferences. As with the above authentic assessment tools, the rubric is often the most effective tool to help monitor and measure student self-assessment, though Andrade and Valtcheva (2009) warn that simply handing one out to students before an activity does not guarantee any learning gains because students need to deeply understand and value the criteria. Ross (2006) also notes the importance of creating a classroom climate in which students feel comfortable assessing themselves publicly. He urges teachers to focus students' attention on learning goals (with a focus on learning ideas) rather than performance goals (that tend to focus on out-doing one's peers) and promotes peer assessment.

Peer assessment, much like self-assessment, is an authentic assessment tool that gives students a key role in evaluating learning. Peer assessment approaches can vary greatly but, essentially, it is a process for learners to consider and give feedback to other learners about the quality or value of their work (Topping, 2005). Peer assessments can be used for variety of products like papers, presentations, projects, or other skilled behaviours. Peer assessment is understood as more than only a grading procedure, but it is also envisaged as a teaching strategy since engaging in the process develops both the assessor and assessor's skills and knowledge (Li, Liu, & Steckelberg, 2010). Feedback that students are asked to provide can confirm existing information, identify or correct errors, provide feedback on process, problem solutions or clarity of communication (Butler & Winne, 1995).

The primary goal for using peer assessment is to enhance further learning and provide immediate feedback to learners. Peer-assessment is all about taking stock of another person's performance and it is believed to enable learners perform better since assessment was done by a friend and not the teacher…in this wise criticism is less felt". Also peer-assessment focused on improvement not grading and this enable learner for formative purposes. Peer-assessment, students often assess other students' work compared to the criteria developed by the instructor, or both students and the class instructor (Bekoe et al, 2013).

Alternative assessment approach is being incorporated gradually into the education system. As a new approach in the classroom, alternative assessment does not necessarily replace the traditional assessment approach, but comes in as a supplement to make the whole classroom assessment practice complete. Alternative assessment is based on principles which place the learners' learning needs and interests at the centre of learning (Van der Horst & McDonald, 2003). This assessment approach emphasizes the holistic development, growth, achievement and progress of each individual learner. The main focus of alternative assessment is the development of the learners' being in totality. Assessment within this framework is to promote teaching and learning which is aimed at nurturing and enhancing the learners' skills, knowledge, values and attitudes (Barootchi & Keshavarz, 2002:280; Van der Horst & McDonald, 2003).

Alternative assessment or assessment for learning serves as remedial teaching to the tutor…. Also in the classroom context it assists the tutor to find out about what has been absorbed by students (Bordoh, Bassaw &Eshun, 2013). Reflection, according to Ross (2006) refers to thinking about process and product. The focus is not on what the learners know and how knowledge develops, but on how knowledge is constructed by the learners and enhanced by meaningful and challenging tasks that the learner performs in the classroom. During learning, the learners seek to make sense of their experiences, they engage in active cognitive processing such as paying attention to relevant incoming information and mentally organizing this incoming information with existing knowledge (Mayer, 2002).

Projects can be created individually or as a group. They can possess authenticity; real life related concepts as well as prior experience of the learners. Any type of method that display what student know about a specific topic, i.e. development of plans, art work, research proposals, multimedia presentations,

is considered as project. Problem-based learning requires learners to use their problem solving skills to respond to a given situation. For instance, they can be presented a scenario and asked to provide strategies or solutions. The task is assigned to either individuals or groups. They present it with the findings they come up with in various forms, such as multimedia presentation, role-play, and written report (Simonson et al., 2000).

Following from the views above, it is evident that the teaching, learning and assessment process, as well as the learners' process of development depend entirely on a dialogue between the educators and learners. During teaching and learning, the two parties interact with one another and engage in a meaningful process, which leads to the construction of knowledge through the social negotiation and meaning-making activities.

3. Methodology

A descriptive case study was suitable for this study as it allows for the gathering of data in a real context, and it takes into account the political and ideological context within which the research is situated (Lunn, 2006). It is an intensive description and analysis of a bounded system (Bassey, 2003) used to gain an in-depth understanding of the situation and meaning for those involved. As the study was carried out in ten SHSs in the central region of Ghana, the data were used together to form one case. Several research scholars including Bassey (2003) and Yin (2009) consider that case studies are particularistic, descriptive and heuristic and are particular to a certain context and have a more human face than other research methods, as it is strong on reality and context which enables 'thick' description.

The Population in this study comprised all the Senior High School Social Studies teachers in the Central Region of Ghana. Simple random sampling technique was used to select Twenty (20) Social Studies teachers and ten (10) SHSs out of the two hundred and eighty five (285) SHS Social Studies teachers from fifty seven (57) SHSs in the Central Region of Ghana.

The study used both primary and secondary sources of data. The primary data was made up of interview schedules. In each of the study schools two Social Studies teachers were interviewed. The interview guide was made up of fourteen semi-structured questions.

Secondary data was obtained from existing documents on assessment practices in general, and polices on assessment in the schools. The main instrument for data collection was the interview schedule. Both the interview and document analysis solicited for qualitative information. Data analysis was done by the use of descriptive based on the themes arrived at the data collection. This was based on questions on the semi-structured interviews.

4. Teachers' Perceptions of Authentic Assessment in Assessing Students' Learning Outcomes

Teachers' perceptions of authentic assessment in assessing students learning outcomes are presented under this section. When this question was asked- *how do you see authentic assessment*? Three (3) teachers indicated that authentic assessment will be laborious for both the teacher and students, although it can improve both the teaching and students' learning of Social Studies. Four (4) teachers expressed their view that an inclusion of authentic assessment as an integral part of the normal Social Studies assessment processes will mean more work load. One of these four teachers stated that *"ones it involves interview and observation means that it's scoring will not be valid and therefore subjective".* Another seven (7) teachers contended that the traditional assessment strategies they employ in their classrooms assist them to get enough information about the quality of their teaching and the progress of their students' learning on time. The grading process is also valid and reliable. Five (5) of the teachers indicated that the information obtained from traditional assessment could be used to make necessary whole class instructional adjustments such as re-teaching, trying alternative instructions, or offering more opportunities for practice but not of authentic assessment. One (1) teacher opined that "authentic assessment can provide valuable information and improve students' learning regarding how effective a teacher's instructional strategies have been to date. It informs both the students and teacher about any adjustments that should be made in the learning process to improve students' understandings and achievements". However, a teacher passed a funny comment in one of the interview sessions but very necessary. She said: "*the more scripts I mark the more money I receive. No one will pay me if I undertake this tedious authentic assessment task".* This really shows that respondents were not abreast with the benefits of authentic assessment.

Furthermore, when these teachers were asked about *how will your students benefit from authentic assessment?* Most of these teachers acknowledged the support authentic assessment will provide in informing them of the effectiveness of their instructional strategies as five (5) of the teachers indicated that authentic assessment will help them to identify the level of understanding their students have reached, become aware of students' strengths and weaknesses and to monitor their current progress during the learning process. Seven (7) teachers perceive that it will help them to employ alternative approaches or methods in their teaching, because certain methods can help certain students to learn better.

Another five (5) teachers submitted that authentic assessment will enable them to use a wide range of effective, practical, day-to-day teaching techniques in their classroom situation. Two pointed out that authentic assessment "*will support them in gaining immediate feedback on their own*

teaching as well as on students' work". However all twenty teachers involved in this study agreed that "*teachers are not the only ones who will benefit from authentic assessment*". The students will benefit too because authentic assessment will improve their learning, their attitudes toward learning, and help them to take responsibility for their own learning as one stated "*authentic assessment will enable students to identify their own strengths and weaknesses and know their current progress during the learning process. It will also help students to make further decisions and maintain current standard of learning*". This is in support of Darling-Hammond, Ancess, and Falk (1995:3) argue that authentic assessments allow students to engage in "complex and challenging tasks" that would allow them to integrate, synthesize, evaluate, and create their own knowledge. They further argue that authentic assessments allow teachers to work collaboratively as a staff and district to formatively shape what and how students learn, as well as communicate that progress to parents and community members.

5. Conclusion and Recommendations

The findings of this present study indicated that authentic assessment, as a classroom assessment strategy, does have a place in SHS in the central region of Ghana. The teachers in this study perceived that the form of authentic assessment used in their classrooms was limited by policies, time, resources and assessment methods employed by their schools. These policies affect their use of this assessment method because the subject is a core in the SHS.

Clearly, there were huge noticeable gaps and variations between the teachers' perceptions of authentic assessment and their relevant practices in their classrooms. Although they could practically demonstrate some level of understanding in what constitutes authentic assessment processes, they still lacked comprehensive and profound understanding of the real benefits and uses of authentic assessment purposes to social studies teaching and learning.

The curriculum content of Social Studies should be re-oriented to incorporate more authentic assessment practices at the SHS level and even at the University level. This should emphasize on classroom based test and not on standardized test. Regular in-service training and capacity building workshops on classroom assessment should be organized for these SHS teachers to improve their use of assessment as a tool to enhance teaching and learning.

References

[1] Andrade, H., & Valtcheva, A. (2009). Promoting Learning and Achievement through Self-Assessment. *Theory into Practice*, 48(1), 12-19.

[2] Bassey, M. (2003). Case study research. In J. Swann & J. Pratt (Eds.) *Educational research in practice: Making sense of Methodology*, 111-123.

[3] Bekoe, S. O., Eshun, I., & Bordoh, A. (2013). Formative assessment techniques tutors use to assess teacher-trainees'

learning in Social Studies in Colleges of Education in Ghana. *Research on Humanities and Social Sciences, 3*(4), 20-30.

[4] Bordoh, A., Bassaw, T. K., & Eshun, I. (2013) Social Studies Tutors' Cognition in Formative Assessment in Colleges of Education in Ghana. *Developing Country Studies*, 3(11), 1-11.

[5] Boud, D., & Falchikov, N. (2005). Redesigning assessment for learning beyond higher education. In A. Brew, and C. Asmar, C. (Eds.), Research and Development in Higher Education, 28, 34-41.

[6] Butler, D. L., & Winne, P. H. (1995). Feedback and Self-Regulated Learning: A Theoretical Synthesis. *Review of Educational Research*, 65(3), 245-281.

[7] Craddock, D., & Mathias, H. (2009). Assessment options in higher education. *Assessment and Evaluation in Higher Education,* 34, 127-140.

[8] Cumming, J., & Maxwell, G. (1999). Contextualising authentic assessment. *Assessment in Education: Principles, Policies and Practices*, 6(2), 177 – 194.

[9] .Darling-Hammond, L., Ancess, J., & Falk, B. (1995). *Authentic assessment in action: Studies of schools and students at work.* New York: Teachers College Press.

[10] Dietel, R. J., Herman, J. L., & Knuth, R. A. (1991). *What does research say about assessment?* NCREL,Oak Brook. Retrieved: 17-06-2014. www.ncrel.org/sdrs/areas/stw_esys/4assess.

[11] Elliott, S. N. (1995). *Creating meaningful performance assessments.* (ERIC Digest), EDRS no: ED381985.

[12] Eshun, I., Bordoh, A., Bassaw, T. K., & Mensah, F. (2014). Evaluation of Social Studies students' learning using formative assessment in selected Colleges of Education in Ghana. *British journal of education*, 2(*1*), 39-48.

[13] Firestone, W. A., Mayrowetz, D., & Fairman, J. (1998). Performance-Based Assessment and Instructional Change: The Effects of Testing in Maine and Maryland. *Educational Evaluation and Policy Analysis*, 20(2), 95-113.

[14] Li, L., Liu, X., & Steckelberg, A. L. (2010). Assessor or Assessee: How Student Learning Improves by Giving and Receiving Peer Feedback. *British Journal of Educational Technology*, 41(3), 525-536.

[15] Lunn, J. (2006). A Study on Teacher Professionalism and Teacher Leadership: The Teachers' Viewpoint. (Master's thesis, University of Waikato, 2006), Hamilton, New Zealand. Retrieved: 20-12-2013. www.adt.waikato.ac.nz/public/adt-uow2007.

[16] Mayer, R E. (2002). Rote versus meaningful learning. *Theory into practice,* 41 (4):226-232.

[17] McDonald, B., & Boud, D. (2003). The Impact of self-assessment on achievement: the effects of self-assessment training on performance in external examinations. Assessment in Education, 10(2), 209-220.

[18] McMillan, J. H., & Hearn, J. (2008). Student Self-Assessment: The Key to Stronger Student Motivation and Higher Achievement. *Educational Horizons*, 87(1), 40-49.

[19] Palm, T. (2008). Performance Assessment and Authentic Assessment: A Conceptual Analysis of the Literature. *Practical Assessment, Research and Evaluation*, 13(4).

[20] Pellegrino, J.W., Chudowsky, N. & Glaser, R. (2001). *Knowing What Students Know: The Science and Design of Educational Assessment*., Washington, DC., USA. National Academies Press.

[21] Reeves, T. C. (2000). Alternative assessment approaches for online learning environments in higher education. *Educational Computing Research*, 3(1), 101-111.

[22] Ross, J. (2006). The Reliability, Validity, and Utility of Self-Assessment. *Practical Assessment, Research & Evaluation*, 11, 1-13. Retrieved: www.pareonline.net/pdf/v11n10.pdf.

[23] Shepard, L. A. (2009). Commentary: Evaluating the validity of formative and interim assessment. *Educational Measurement: Issues and Practice*, 28(3), 32–37.

[24] Sadler, D. R. (2009). Grade integrity and the representation of academic achievement. *Studies in Higher Education*, 34, 807-826

[25] Simonson M., Smaldino, S, Albright, M., & Zvacek, S. (2000). *Assessment for distance education. Teaching and Learning at a Distance: Foundations of Distance Education.* Upper Saddle River, NJ: Prentice-Hall.

[26] Stanford, Pokey & Reeves, Stacy, (2005). Assessment that drives instruction. *Teaching Exceptional Children*, 37 (4) 18-22.

[27] Sternberg, R. J. (2007). Assessing what matters. *Educational Leadership*, 65 (4) 20-26.

[28] Topping, K. J. (2005). Trends in Peer Learning. *Educational Psychology*, 25(6), 631-645.

[29] Van der Horst, H. & McDonald, R (2003). Outcomes based education: *Theory and practice*. South Africa: Tee Vee Publications.

[30] Wangsatorntanakhun, J. A. (1997) "*Designing Performance Assessments: Challenges for the Three-Story Intellect*" Ruamrudee International School, Bangkok, Thailand.

[31] Wiggins, G. (1998). *Educative assessment: Designing assessments to inform and improve student performance.* San Francisco, Calif.: Jossey-Bass.

[32] Wiggins, G. P., & McTighe, J. (2005). *Understanding by design* (2nd ed.). Alexandria, VA: ASCD.

[33] Winking, D. (1997). *Critical issue: Ensuring equity with alternative assessments*. Oak Brook: IL. Retrieved: 20-07-2014. www.ncrel.org/sdrs/areas/methods/assment/as800.htm

[34] Winking, D. (1997). Critical issue: Ensuring equity with alternative assessments [online document]. NCREL (North Central Regional Educational Laboratory), Oak Brook: IL. Available online: http://www.ncrel.org/sdrs/areas/methods/assment/as800.htm

[35] Wren, D. G. (2009). *Performance Assessment: A key component of balanced assessment system*. Virginia Beach: Virginia Beach City Public Schools, Department of Research, Evaluation, and Assessment.

[36] Yin, R. (2009). *Case study research: Designs and methods*. London: SAGE Ltd.