Perceptions of University Teachers about Integrated Assessment Approaches towards Learners' Holistic Development

Sadruddin Bahadur Qutoshi*, Muhammad Ramzan**and Javed Iqbal*

Abstract

This research aims to address the question, 'how the perceptions of teachers about Integrated Assessment Approaches contribute towards learners' holistic development'. The participants of this qualitative case study were purposefully selected for semi-structured interviews from three head of departments and focused group discussions from two groups comprises six members each. The study revealed that research participants mostly rely on *assessment as 'of' learning* approaches to assess learning of students, but to some extent they also give importance to other assessment approaches such as *assessment as 'for' learning*. Moreover, findings suggest that to focus on holistic development of learners, teachers to employ *learning responsive pedagogies*. However, teachers assert that they face many challenges in widening the knowledge domain of learners as the nature of assessment hardly focuses 20% of the curriculum during semester for promotions to the next level. The study recommends that by introducing an integrated assessment approaches could enable teachers to orient self with a wider picture of curriculum and pedagogies which could better focus on how to increase their knowledge domain. To this end, research highly recommends institutions to provide training and resources to staff to apply integrated assessment approaches in their institutions for holistic development of learners.

Keywords: Integrated assessment approach, assessment as 'of' learning, assessment as 'for' learning, learners' holistic development, learning responsive pedagogies.

^{*} Assistant Professors, Email: sadruddin.qutoshi@kiu.edu.pk

^{**} Professor, Karakoram International University, Gilgit Baltistan

Introduction

The educative practices of schools especially higher educational institutions show that there exist a huge space to fill in areas of Integrated Assessment Approaches (IAA) in order to improve both teaching and learning (Qutoshi, 2016; Lee, 2005). The approaches to integrated assessment would be linked with different levels of information related to assessment of attitude, skill, knowledge, performance, and other learning related activities and projects during a course of study. Such approaches to assessment would incorporate not only variety of assessment tools and techniques, but also involve multiple levels of stakeholders (such as teachers, peers, head of departments etc.) to get insight about learning of learners through a *systematic assessment*[†]. Such a systematic assessment that integrates multiple approaches to assess learners, which focuses on the 'activity of their own development' (p. 5).

In the context of Pakistan the practices of educational institutions at university level appear to be less supportive to the idea of such an integrated assessment that has an inclusive nature. The idea of using an inclusive assessment and or integrated assessment appears to be embedded within the philosophy of how curriculum, teaching and learning activities facilitate student's learning in a wider perspective - i.e., the holistic development of learners (Daewani, 2012). Thus an inclusive assessment is a kind of integrated assessment which can provide a wider picture of the development of an individual/learner group of people and/or projects. The integration of such approaches to assessment enables teachers to think about an inclusive view of assessment as 'of' learning, assessment as 'for' learning and assessment as 'through' learning of learners that lead towards assessing holistic development of learners (Qutoshi, 2016). However, the universities, including the research cite, relying on isolated models of assessment such as: 1) single framed assessment, 2) one aspect focused assessment, 3) concepts of only summative or only 'formative assessments' (Gibbs & Simpson, 2004; Muzaffar, 2015), and 4) not a *fair mix of both* summative and formative assessments etc., could not provide a wider picture of holistic development of learners.

The nature of this project is thus to explore how an IAA that is linked with authentic assessment focusing on learning development of learners are perceived by teachers in educational institutions. The idea of Callison (1998) and Luitel and Taylor (2003) about

[†] Assessing learning through systematic way means collecting authentic evidence of learning i.e., evidence based assessment that shows a developmental trend (focusing on how learning of learners is assessed and to what extent such learning shows progressive trend). The systematic assessment has a step by step assessing of students' learning progress.

authentic assessment was to introduce an assessment that is evidence based from real life situations where students perform tasks, engage in a process of developing their understanding, and give students an opportunity to demonstrate the full range of their abilities rather than memorizing things. So, it could be termed as meaningful assessment that gives curriculum and instruction a guideline on how to improve learning (Youth, 2001 as cited in Luitel, 2003). Thus, by introducing such an approach to assessment at Duikar University[‡] (DU) would enable both teachers and learners leading them towards achieving the broader vision of the university. By exploring the perceptions and practices of teacher and heads of departments the researchers came up with an inclusive view of assessment that can contribute towards *holistic development of learners*.

In this paper, with such an interest of education, *the purpose of this research* was to: 1) explore the perceptions of teachers and heads about assessment in the context; 2) introduce a fair mix of diverse approaches to assessment which contribute towards holistic development of learners: and 3) explore insights about an integrated assessment system which encourage teachers to concentrate on holistic development of learners.

Literature Review

Assessment and its Concepts in Education. The term assessment appears to be very much familiar to every educated person (i.e., a learner) in the world. To this end, the basic understanding about the term is directly linked to tests and testing (concepts associated with assessment). Thus, assessment means to gather or collect all relevant information about a student' progress and achievement in knowledge and skills gained as a result of a teaching course in formal schooling during a particular period of time (Rowntree, 1990). However, in doing so there are many ways to achieve this objective depending upon who decides what is to be assessed, who carries out the assessment (Hargreaves, 2001), where the assessment takes place, how the results obtain and interpret, and what happens next after getting these results.

In particular, each of these questions can be reflected in the light of existing practices to see how things are going on in an educational institution especially at university level. The role and responsibility of those who teach students and have the authority to decide to test their learners matters to a great extent in terms of its effectiveness. Therefore, teachers should use learner centered pedagogies such as the student-centered approach to teaching (Qutoshi & Poudel, 2014) which could enable the learner to be an active partner to teacher(s) in the whole *educational endeavour*.

[‡] A pseudonym used instead of real name of the university

While on the other hand all or some of the decisions related to assessment are carried out by an external agency- may be an examination board, testing service or independent body etc. (Callaghan & Greaney 2001; Rowntree, 1990). Whatever, the practices of assessment might be, the question is what the relationship between teaching and assessment is, and how teaching is viewed in the light of the market needs that could enable a learner to get the required knowledge, skills and develop an attitude which expose them as holistically developed learners. However, the concept of assessment for different assessors may differ in terms of their objectives or purpose of assessment for which they assess by using different types of assessment tools.

Fundamental classifications of assessments. A review of the literature and practices of assessment shows that assessments can be classified according to two basic categories: 1) their purpose - summative assessments versus formative assessment; and 2) their scope of content -classroom assessments versus accountability assessments (Black &William, 2009). Therefore, the purpose of assessment in schools, colleges and universities should be linked to test a learner that to what extent s/he has learnt and it is purely an assessment of learning not an assessment for learning (Gipps, 1996 in Little and Wolf; Black, 1998). However, the former appears to be linked to assessment for grading and promotion purposes but not for the purpose of learning of a learner to test (Wiliam, 2017). Whereas, the latter is highly focused on the learning of learners and may not be used as for grading and promotions.

In the process of collecting the evidences regarding the learning of a learner and decide about the level of learning there exist many kinds of assessment approaches. According to Brown (2001) these approaches could be diagnostic assessment, performance assessment, alternative assessment, construct response assessment, group assessment, peer assessment, self-assessment, oral examination, unknown examinations, projects, presentations, multiple choice questions, portfolios, and computer aided assessments to name but a few (Brown, 2001, Luitel, 2003; Muzaffar, 2015). However, two commonly known concepts of assessments are assessment as 'for' learning and assessment as 'of' learning (Qutoshi, 2016), which are basically the forms of formative and summative assessments respectively (Luitel, 2003; Race, 1998).

Assessment as 'of' learning and assessment as 'for' learning. Assessment as 'for' learning is learner centered ways to supportive techniques that are used to address the learning needs of individuals or groups, and provide timely yet constructive feedback to make corrections and improvements in their learning. While in assessment as 'of' learning is simply a form of assessment that just focuses on what learners have learnt, and report accordingly without further actions on learning of learners (Hargreaves, 2001;

Qutoshi, 2016). The former focuses on the continuous support and assistance to the learner through an exploration of his or her learning and providing a feedback on it. While the latter focuses on the promotion of learner to the next grade by summing up the total learning in the form of written questions answers only.

Thus, formative assessment is focused on enabling learners to make sense of their learning and such type of assessment represents metaphor of assessment as 'for' learning (Qutoshi, 2016) and it is linked with pedagogies and the process of teaching and learning practices to see how learning can be embedded within the system of assessment (Hargreaves, 2001) to ensure effective learning outcomes-the learning that occurs as a result of step by step progress of learners guided by the feedback from teachers. Such an incremental way of progress of learning could be termed as developmental assessment. While assessment as 'of' learning is purely looking at the end of a course or semester or at the end of the year, and focuses on whether a student is passed or failed a course depending upon the level of reproduction of the content taught and/or learnt in a formal settings.

Diverse range of studies (Luitel, 2003; Muzaffar, 2015; Qutoshi, 2016) show that the assessment as 'of' learning is: 1) One dimensional; 2) Summative; 3) Apart from the curriculum, but drives the teaching ('teaching for the test'); 4) Inauthentic; 5) Context independent; and 6) Inflexible. While assessment as 'for' learning is: 1) multidimensional; 2) Formative; 3) Integrated into the curriculum; 4) Authentic; 5) Context embedded; and 6) Flexible. However, the nature and purpose of assessments both are the decisive factors for test takers to use in their own context to see the learning outcomes of students (Twing & Boyle, 2010).

A Theoretical Framework for an Integrated Assessment Approach. Approaches to Integrated assessment are ways to combining many other factors which indirectly or directly affect the learning outcomes of learners in schools. This paper focuses on a simple model based on four main components: 1) The process of assessment; 2) The institutional arrangements for the assessment; 3) The tools of assessment (particularly the indicator set); and 4) The products of assessment-periodical reports and data sets (Hardi, Pinter, & Turner, 1998; Lee, 2005).

Before discussing on processes of assessment with reference to a part of IAA it is very important to know the existing practices of educational institutions where teachers use educational assessments in their day-to-day classroom activities to monitor student progress in different ways. However, it is vital for teachers and other stakeholder to know how teachers perceive such aspects of assessment while assessing their learners. Every institution has its own way to assessment process based on their concept of assessment, design of assessment, administration of assessment, evaluation of assessment and reporting of assessment data with learners, parents, and other stakeholders of the schools (Twing & Boyle, 2010). Because of these different views, processes and purposes, no assessment is *one-size-fits-all*. Thus, every assessment design serves a particular role in an education system and has its own shortcomings when used for a purpose beyond its intended use.

So, educational assessments are conducted in a variety of ways and their outcomes can be used for a variety of purposes. Moreover, in a complete, inclusive and integrated assessment system, all of the assessments are coherently designed to work together in support of student achievement. Therefore, IAA is a system that facilitates teachers, students, and administrators to focus on learning outcomes by incorporating almost all kinds of basic, skills, knowledge, and attitude to be assessed in an integrated form of assessment. One of the basic examples of integrated assessment could be programmed for International Student Assessment (PISA) that focuses on numeracy, reading and science knowledge and skills of age 16 learners. With the help of PISA assessment one can take decision about the success rate of these students in their future occupations. IAA is a complete or comprehensive way to look at different aspects of learning and skills of learners. Such an approach can provide a wider picture of competencies of learners that leads towards holistic development of learners.

Methodology

In this study, the purpose of inquiry was to know how a holistic, in-depth investigation (Zainal, 2007) of research participants' beliefs and views about an integrated assessment approach in the context of DU Gilgit. To this end, we found a qualitative case study design more appropriate to conduct this study in order to achieve our desired objectives. According to (Yin, 1994) a case study research methodology is an approach to research that focuses on how to collect data using different sources in a real life situation to explore a problem under investigation. Such a way of data collection enables the researcher to improve data credibility (Patton, 1990; Yin, 2009).

However, the credibility of data highly depends upon the nature and purpose of sample selected from a particular population (all teachers and head of departments of two campuses of DU). Therefore, the researcher selected two groups from each campus of DU consisting of six teachers (2 from Faculty of Natural Sciences, 2 from the Faculty of Social Sciences and 2 from Faculty of Education) by using purposive sampling techniques. In a case study design such a sample well justifies for focused group discussions, therefore, we collected data from these two groups through focused group discussion techniques.

On the other hand we have selected only three head of departments for semistructured interviews by using purposive sampling techniques. To this end, the researchers developed an interview guideline with an open ended questions before conducting these interviews. The use of multiple sources (such as semi structured interviews and focused group discussions in this case) enabled us to ensure the authenticity of data that were collected (Denzin & Lincoln, 1994).

The case study approach to research demands to ensure highest level of care while engaging with the whole process of data collection and analysis. Therefore, relevant data were carefully and purposefully collected that enabled us to proceed systematically for data analysis. Analyzing data means "... pattern matching, linking data to propositions, explanation building, time-series analysis, logic models, and cross-case synthesis" (Yin (2009, p. 26). Whereas Stake (2000) explains that categorical aggregation and direct interpretation are two types of analysis that researcher can use. In the process of analysis, we have focused on how to ensure data clarification, tabulation of the data into expressive forms that further helped us to generate themes. This stage of analysis helped us to well organize themes into meaningful manner so as to generate a final list of selected themes.

Findings and Discussions

Using a thematic analysis, as mentioned in the methodological part of this paper, we came up with key findings under following thematic areas such as: 1) approaches to assessment practices; 2) perceptions of stakeholders about IAA; and Implications and challenges for universities to use IAA.

Approaches to assessment practices

Some interesting findings emerged after analyzing data collected through focused group interviews. The participants expressed their views and beliefs that they are mostly relying on summative assessment practices for the purpose of grading and promotions. Metaphorically speaking the perceptions of research participants reveal that their assessment approaches can be termed as *assessment as 'of' learning*. Such approaches are narrowly conceived notions of assessment which focus on only what the learner can reproduce (Applebee, 1996; Luitel, 2003; Qutoshi, 2016). These assessment practices are detached from teaching practices and can be expressed in the form of assessment as an add-on activity (Luitel, 2009). That means assessment begins when teaching finishes. One of the participants explained such practices in these words,

... Midterm exam and semester exam with a structured way of assessment cannot contribute to improve the learning of students because the way teaching is going on and assessment is conducted does not respond each other...when teaching ends, assessment begins. So, there is a huge gap between teaching and assessment that needs to remove to focus more on powerful earning'. (Interview, May 20, 2017)

In a response to a question another participant further explains that '... the scope of such tests is limited towards learning and very traditional approach to assessment which focuses on labeling learners with pass/fail in a particular subject'. Moreover, another participant explained similar views such as,

Our assessment pattern (i.e., Nature of question paper and level of responses to our questions...) hardly covers 20% of curriculum... and if a student obtains 80% marks... does this level of achievement lead towards wider picture of learning or a narrowly conceived view of student learning... to address such kind of issues of assessment and teaching we need to provide a comprehensive view of broader area of curriculum through contextually supportive teaching techniques...'

One can infer that canonical ways of assessment practices which are structurally detached from pedagogical activities could not enable learners to make sense of their learning as part of both teaching and assessment. To address these culturally disempowering natures of teaching, learning and assessment practices, innovative yet learning responsive teaching and assessment practices are highly desired to make a difference in the lives of learners (Qutoshi, 2016).

However, participants' responses about their diverse range of activities support other approaches such as formative assessment. The evidences from both semi-structured interviews from three head of departments and focused group discussions enabled the researchers to infer that they are also using some assessment approaches which contribute students' learning. One of the participants explains further that '... we engage students in presentations of their assignments in class, creative writing activities, debates, discussions on topics, e/portfolios and other forms of assessing students learning through reflections on their learning, to name a few'. (Interview, May 20, 2017)

Perceptions of Practitioners about IAA

Sharing their views about an approach that is an inclusive and integrated one the university teachers and heads of departments appear to agree with the ideas that using multiple yet diverse nature, scope and purpose of assessment practices could widen the domain of students' learning. Perhaps, to them, exposing learners with multidimensional ways of assessment of their learning in an inclusive and integrated manner can better contribute towards holistic learning. One of the participants elaborated her views about such a view of IAA,

... Yes, I do agree with the idea of integrated assessment approach that to me, could be used both summative and formative assessment tools by giving them equal importance. In so doing, we can achieve both the purposes of assessment for grading as well as assessment for learning. (Interview, May 20, 2017)

Asking a question about the nature of IAA that should be an authentic yet developmental in scope (Luitel, 2003; Qutoshi, 2016) the findings show that some of the teachers hold interesting views about what does it mean to be authentic and developmental for an assessment to be an integrated and inclusive? Responding to the question, some of the participants were this to say'... gathering assessment data with clear indicators of what and how students have learnt and at which stage they have reached as comparative to their previous position in terms of their skill, attitude and knowledge domain'. (Interview, May 20, 2017).

However, none of the participants could explain the metaphor of *assessment as* 'through' learning (Qutoshi, 2016) which highly demands assessors to be very creative yet innovative towards employing a diverse range of assessment tools to collect authentic data about learners' performance not only in a developmental trend but also in an inclusive manner. Such an assessment could be a form of transformative assessment that is embedded within the philosophical underpinnings of holistic development of learners. The findings posits that assessors, practitioners/teachers need to develop a wider understanding of assessment as 'through' learning approaches in order to empower their learners for their holistic development that appears to be missing in the current situation.

Implications and Challenges in Adopting IAA

It was found a consensus among the research participants during both focused group discussions from teachers and semi-structured interviews from head of departments that educational institutions, especially universities need to introduce IAA to empower their learners with a wider domain of knowledge, skills, values and dispositions. A participant was this to say,

'I think our assessment practices need to reflect critically from the standpoint of its nature, process and type of tools that we use in our assessment practices. Reflections can inform us where we are and where we need to go in order to improve better learning of learners who can face the challenges of today's competitive world. (Interview, May 28, 2017)

Probably reflections on self and others in a socio-pedagogical lifeworld of practitioners in educational institutions can enable reflective practitioners i.e., the assessors to suggest new ways of looking at assessment practices, linking with curriculum shades and pedagogical approaches which can be responsive towards contributing the holistic development of learners (Qutoshi &Poudel, 2014; Qutoshi, 2016). However, such kind of engagements appear to be missing in everyday practices of academia, yet they seem to focus on taken for granted ways of teaching and assessment notions (appear to be embedded within their everyday educative endeavours) that could not contribute towards powerful learning of university graduates.

While posing a question it came to know that participants highly support the idea that there is no way to ignore the benefits of an inclusive approach to assessment yet it appears to be very challenging for institutions if there exists gaps between resources, knowledge, skills and attitude of teachers, head of departments and the commitment of institutions towards such a challenging job to perform. One of the participants expressed his concerns,

... The implications for adopting such a system of assessment lead to challenge the status quo and to bring reforms in the existing system of assessment... however, bringing reforms is not so simple in terms of human as well as material resources that would facilitate and ensure powerful learning by introducing enabling pedagogies. (Interview 28 May, 2017)

Sharing possible challenges to adopt IAA most of the participants seem to agree that such reforms in assessment practices would lead institutions to improve all kinds of resources including human. However, one of the participant expressed his concerns that 'assessors, especially the senior professors may resist switching to another form of assessment that is naive to them and may force them to revisit their own approaches to teaching'. (Interview 28 May, 2017)

One of senior heads of departments expressed that 'the challenges for institutions to adopt an IAA not only depend upon the required level of available skilled and knowledgeable workforce along with other necessary resources but also the mindset of the workforce towards change'. (Interview 28 May, 2017)This infers that bringing a

positive change in the practices of educational institutions is a challenging job yet not impossible depending upon the commitment of the institutions to what extent they want to get benefit of this system and how to handle all possible challenges to achieve the objectives of IAA.

Conclusion

The research findings significantly support the notion behind an extensive reliance on summative assessment practices deeply embedded within the cultural disempowering nature of educative practices in the context of university education in Pakistan. However, the beliefs and perceptions of teachers and head of departments reveal that the activities of teachers which they used to do in a very limited scope explain their familiarity with formative approaches to assessment. To think about a wider interest of education stakeholder must critically reflect upon their existing practices in the light of their beliefs and perceptions by embracing the questions of the kind, 'how can we improve the learning of our students the way we are assessing' (Whitehead, 1989). Research findings show that stakeholders, especially teachers appear to make their own meaning of IAA to improve students' learning at university level. Perhaps, un/consciously believing in a narrowly conceived view of education with a particular mid-set, the practitioners appear to elaborate their views of integrating both traditional assessment approaches - the summative assessment such as mid-term tests and end semester exams etc., as well as re/formative assessment approaches - the formative assessments such as reflections, creative writings, e/portfolios to name a few. However, to make better sense of an IAA from the standpoint of emancipatory interest of education (Habermass, 1972) they need to develop clear understanding of assessment as 'through' learning approaches as inclusive yet authentic developmental ones which can contribute towards holistic development of learners. Research reveals that adopting an IAA would lead institutions to revisit their existing practices and embrace a broader view of education that could contribute holistic development of their learners. However, having culturally disempowering nature of educational systems with limited knowledge, poor skills, and lack of positive attitude of people at different levels of educational institutions creating an enabling environment that could empower learners with a wider view of education seem challenging.

References

- Applebee, A. N (1996). Curriculum as conversation. Chicago: The university of Chicago press.
- Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability, 21*(1), 5-31.

- Brown, G. (2001) Assessment: A Guide for Lecturers, Assessment Series, LTSN Generic Centre, York.
- Callison, D. (1998). Authentic Assessment. School Library Media Activities Monthly, 14 (5), 42-50.
- Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994). Handbook of qualitative research. Thousand Oaks, CA: Sage.
- Daewani, S. S. (2012). Exploring classroom based assessment strategies to assess reading skills of young learners (Unpublished master's dissertation). Aga Khan University, Karachi, Pakistan.
- Gibbs, G., & Simpson, C. (2004). Conditions under which assessment supports students" learning? Learning and Teaching in Higher Education, 1, 3-31
- Gipps, C. (1996). Assessment for Learning. In Little, A. & Wolf, A. (eds.) Assessment in Transition, (251-261). Oxford: Pergamon.
- Habermas, J. (1972). *Knowledge and human interest (2nded.)*. London, England: Heinemann.
- Hardi, P., Pinter, L., & Turner, J. (1998). Measurement and indicators program International institute for sustainable development. Integrated assessment system for Pakistan's North West frontier province. Winnipeg, Canada: IISD.
- Hargreaves, E. (2001). Assessment for learning in the multigrade classroom. International Journal of Educational Development 21 (2001), 553-560.
- Lee, N. (2005). Bridging the gap between theory and practice in integrated assessment. Environmental Impact Assessment Review 26 (1), 57-78. http://dx.doi.org/ 10.1016/j.eiar.2005.01.001
- Luitel, B. C. (2009). Culture, worldview and transformative philosophy of mathematics education in Nepal: A cultural-philosophical inquiry (Unpublished doctoral thesis). Curtin University, Perth, Australia
- Luitel, B. C. (2003). Authentic and portfolio assessment. Retrieved from http://www.academia.edu/838388/Authentic and Portfolio Assessment
- Muzaffar, Z. (2015). Improving secondary students' English essay writing skills by implementing portfolio assessment in a private school in Gilgit-Baltistan (Unpublished master's dissertation). Aga Khan University, Karachi, Pakistan.

- Qutoshi, S. B. (2016). Creating living-educational-theory: A journey towards transformative teacher education in Pakistan (Doctoral thesis). Kathmandu University, Nepal. Retrieved from http://www.actionresearch.net/living/living.shtml
- Qutoshi, S. B., Poudel, T. (2014). Student-Centered Approaches to Teaching: What does it mean for the stakeholders of Community School, Karachi, Pakistan? *Journal of Education and Research*, 4(1), 19-33. DOI: http://dx.doi.org/10.3126/ jer.v4i1.9620
- Race, P. (1998). The Lecturer's Toolkit 2nd Edition. London: Kogan Page Ltd.
- Rea-Dickins, P., &Poehner, M. E. (2011). Addressing issues of access and fairness in education through Dynamic Assessment, Assessment in Education: Principles, Policy & Practice, 18(2), 95-97. http://dx.doi.org/10.1080/0969594X.2011. 567076
- Rowntree, D. (1990). Teaching through Self-Instruction. (2nd Ed.). London: Kogan Page.
- Stake, R. E. (2000). Case studies. In Norman K. Denzin & Yvonna S. Lincoln (Eds.), Handbook of qualitative research (pp.435-453). Thousand Oaks: Sage.
- Twing, J. S., & Boyle, B. (2010). Integrated Assessment Systems for Improved Learning. Paper presented at the 36th Annual Conference of the International Association of Educational Assessment (IAEA), Bangkok, Thailand, 22-27 August, 2010.
- Whitehead, J. (1989). Creating a living-theory from questions of the kind, 'how do I improve my practice?' Cambridge Journal of Education, 19(1), 41-52.
- Wiliam, D. (2011). Embedded formative assessment. Bloomington, In: Solution Tree. Wiliam, D., & Black, P. J. (1996). Meanings and consequences: a basis for distinguishing formative and summative functions of assessment? British Educational Research Journal, 22(5), 537-548.
- Wiliam, D. (2017). Assessment and learning: Some reflections, Assessment in Education: Principles, Policy & Practice, 24:3, 394-403, DOI: 10.1080/0969594X.2017. 1318108
- Yin, R. K. (2009). Case study research design and methods: Applied social research method series (4thed.). Thousand Oaks, CA: Sage.
- Zainal, Z. (2007). Case study as a research method. Jurnal Kemanusiaan, 9, 1-6.