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# Assessing the Assessor

Ashley Downing

**Abstract**: This paper addresses the educational need to have students participate in class. It looks at assessing student participation by discussing the important role teachers have in engaging their students. It also addresses why a student's participation is so important to their academic success and looks at ways in which teachers can engage students to participate through the promotion of active learning and how this process can be assessed.

**Keywords**: participation, student-centered approach, active learning, feedback

#### Introduction

If you have been a product of a k-12 education system sure enough you have had an unenthusiastic teacher similar to the monotone Economics teacher in Ferris Bueller's Day Off. How can we expect students to be passionate about learning when we have teachers that are not passionate about what they're teaching? We can't. It is without doubt that a student's participation in the classroom correlates with how well they perform on quizzes and exams. The higher a student's participation is, the better they will understand the content of a subject (Bolkan). Since participation is so crucial to academic success, teachers are becoming more and more concerned with how to assess their student participation. While there are many different approaches to assessing the amount and quality of student participation, educators are skipping an important step (Darling-Hammond). Before you can assess student participation, a teacher first has to be able to adequately engage their students, thus, teachers need to be assessed on their ability to engage.

#### Why is student participation so important?

The dictionary definition of participation is "the act of taking part in something." Therefore it only makes sense that student participation is when a learner plays an active role in their

education. In a study done by Charles Bonwell and James Eison it was concluded that, "students learn more effectively by actively analyzing, discussing, and applying content in meaningful ways rather than by passively absorbing information." Participation in the classroom is essential for efficient learning.

From a teachers perspective there are many benefits of getting students to participate in class. This includes the fact that participation adds interest, and provides teacher and student feedback. Participation can be used to promote student preparation, control what's happening in class, and balance who's contributing in class and how much. (Bolkan)

From a student's perspective there are many incentives to participate in class. Specifically, discussion based participation encourages a dialogue among students, and gives students the opportunity to practice using the language of the discipline. Students can benefit by practicing and developing important speaking skills. Not only will students be likely to catch their professor's attention by participating in discussion, but they will also be more likely to remember class material. (Bolkan)

#### How can teachers engage their students?

There are many ways in which teachers can engage their students which makes the student-centered approach so important. The student centered approach is an approach to teaching where a teacher evaluates their students and teaches to the specific group of learners by letting them have a say in what they learn (Peronne). Each class is unique thus each lecture, discussion, and activity should be too. "To draw students into the depth and complexity of a subject, we must look for topics that relate to student lives" (Peronne, 1994). Teachers need to relate their lesson plan to their specific students in a way that addresses where their students come from, and where they are potentially going. If teachers

accomplish this, it is more likely that a student will be inclined to participate in their curriculum.

A way to accomplish the student-centered approach is through active learning. Bonwell and Eison define active learning as "anything that involves doing things and thinking about the things they are doing." Active learning requires a level of student participation that engages the student, as opposed to sitting and listening quietly. While lectures are needed, teachers should modify traditional lectures to incorporate active learning in order to keep students from day dreaming. The modification of traditional lectures can be done in many ways.

Teachers can:

- Give students time to consolidate their notes during lecture
- Insert brief demonstrations, writing exercises, and/or class discussions
- Include visual based instruction
- The list of what teachers can do to incorporate active learning goes beyond modifying their lectures. It extends to including class activities like:
- Experimental learning events
- Question-and-answer sessions
- Hands on activities
- Drama (role playing and simulation)
- Peer teaching (Bonwell & Eison, Grabinger).

"Active-learning techniques have emerged as strategies for instructors to promote engagement with both discipline material and learning" (Bonwell & Eison). One of the most fertile grounds to promote active learning is by implementing inclass debates. Debates allow students to apply their knowledge in a way they may administer it beyond the classroom. They demand the use and development of critical thinking and oral communication skills, both in which are vital for success in most careers (Kennedy).

In research done for the *Teaching for Understanding Project*, Vito Perrone asked students of all ages and levels of academic success to describe educational settings where they felt they were most engaged intellectually. The common listed elements were when:

 Students got to help define the content (active learning)

- Students had time to wonder and to find a particular direction that interested them
- Topics had a "strange" quality something common seen in a new way, evoking a "lingering question"
- Teachers permitted—even encouraged different forms of expression and respected students' views
- Teachers were passionate about their work.
   The richest activities were those "invented" by the teachers
- Students were able to create original and public products; gaining some form of "expertness"
- Students did something—participated in a political action, wrote a letter to the editor, worked with the homeless
- Students sensed that the results of their work were not predetermined or fully predictable

In order to create a classroom atmosphere that facilitates these experiences, educators must take a student-centered learning approach while utilizing the active learning method. "Students learn best when applying what they are learning and that teachers need to use a variety of instructional strategies, since students learn in different ways" (Kennedy).

#### **Barriers of Active Learning**

Since active learning seems to be one of the most efficient ways for educators to engage their students, you may be asking yourself, why is this not a widely known fundamental learning method in higher education? Bonwell and Eison concluded that there are common barriers to instructional change such as:

- The powerful influence of educational tradition
- Faculty self-perceptions and self-definition of roles
- The discomfort and anxiety that change creates
- The limited incentives for faculty to change Not only are there barriers to instructional change, when it comes to active learning many faculty agree that while active participation is important

there are specific obstacles associated with its implication including:

- The difficulty in adequately covering the assigned course content in the limited class time available
- A possible increase in the amount of preparation time
- The difficulty of using active learning in large classes
- A lack of needed materials, equipment, or resources.

These barriers are small hurdles in the journey to academic success. As classroom needs evolve change is needed to meet those needs. There are ways to approach active learning so that it does not hinder the classroom pace. Teachers that are concerned with not covering course material need to realize that the amount of material covered is not always the amount retained.

#### How to measure a teachers ability to engage

Teachers need to be assessed by students, faculty, and administration on their ability to engage. Student feedback is important in order for teachers to get a learners perspective. "When properly administered and interpreted, the global and specific items contained in student surveys can serve as an important source of information for identifying exemplary teachers and teaching" (Feldman). Student feedback is one way to measure a teacher's ability to engage, however, the credibility of student feedback is a controversial topic when there are online venting sites such as Rate My Professor. In order for student feedback to be most valuable teachers need to solicit informal feedback opportunities that allow students to assess specific aspects of their teaching and do this a couple of times throughout the course (Feldman). Teachers should create their own evaluations that relate to the specific goals and objectives of their course in order to receive student feedback on the most important aspects of the course.

Beyond student feedback, fellow faculty members understand the behind the scenes that goes into being an educator and therefore could also evaluate a teacher's ability to engage. By reviewing a teacher's syllabus and lesson plans faculty can assess how much a lesson plan actively engages students based off of their own teaching styles.

Once teachers are assessed on their ability to engage students by the students themselves, and by fellow educators it is at that point when teachers can cross examine feedback and then grow and better motivate their students to want to participate in class.

#### Conclusion

We need to hold our teachers accountable on their ability to engage before we can ever expect to hold our students accountable on their level of participation. While each school, teacher, and student is different it seems that the barriers in the promotion of active learning are small in comparison to the benefits of this type of participation. "Understanding is about making connections among and between things, about deep and not surface knowledge, and about greater complexity, not simplicity" (Perrone).

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#### Pre-Assessment

#### Kristy Lind

**Abstract**: Pre-Assessment is a test students can take before a new unit to find out what the students need more instruction on and what they may already know. Pre-assessment is a way to save teachers time within the classroom while teaching new material. It is a great way to find out more about the students, what they are interested in and how they learn best.

**Keywords**: Differentiated Instruction, Learning styles, Multiple Intelligence, Pre-assessment, Prescription Differentiation

#### Introduction

There are many types of Best teaching Practices. One of them is Pre-assessment, which helps teachers better understand their students when preparing lessons, and activities to better fit the students in the class. Pre-assessment is a test that can be administered at the beginning of the school year and before new units. The same test may also be used for the post-assessment. Preassessment also helps the teacher learn student's interests and individual learning styles of each student. There are many ways to differentiate instruction for students that will help students take in information in multiple ways. All this information can be organized in a way to help the students and teachers have an easier school year. It can take place at the beginning of the school year and also before each unit.

#### **Differentiated Instruction**

Some teachers assume best practices in their classroom, include such things as students sitting on the floor, listening to music, drawing, being loud or being quiet but doing so as a class. Because these students are doing these things as a class it is not differentiated Instruction. Amy Benjamin writes differentiated instruction is a "variety of classroom practices that allow for differences in students' learning styles, interests, prior knowledge, socialization needs and comfort

zones" (2003). To learn students individual needs we as teachers need to assess those students and pre-assessment can be done at the beginning of the school year and to identify students learning modalities, interests and readiness for content.

Modalities. There are two types of modalities one is learning styles, the other is multiple intelligence. Learning styles differ from student to student. A few examples of learning styles are active learners, verbal learners, and reflective learners. Another type of modality is multiple intelligence, which was created by Howard Garner. He takes a physiological approach to Multiple Intelligence by breaking it into eight categories. These categories help teachers understand the different types of diverse learning abilities. First is logical/mathematical which means the student learns better with logic, reasoning and numbers. Verbal/ Linguistic is another way that the students' strengths are with and language. Another visual/spatial in which a student would rather use graphs, charts and drawings. Students who sound, rhymes, and musical/rhythmical learners. Bodily/kinesthetic learners are better with their hands and have better control over their bodily motions. Anther type is Naturalist/Environmental, these students are sensitive, nurturing and like to use all five sense. The seventh is interpersonal, a type of student who communicates well and can be an extrovert. Last, students who can self-reflect and are introverts they are intrapersonal learners. Multiple intelligence is a great way to separate students out and learn their best learning modality.

Interests. During pre-assessment, teachers have to learn about students' interests and readiness for the content in order to help motivate the students. However, students have to be the ones who motivate themselves. We as teachers have to grab their attention by utilizing what we know about their interests. Once we know the students interests we can integrate it into the

lesson plans. Lynda Rice uses the example that if a student has trouble writing complete sentences use his interests to help him become motivated. A way to do that is by incorporating the students favorite things, which in this case was a superhero. The student was told to write conversation bubbles between other superheroes or even the villains. This helped him become motivated to write complete sentences.

Readiness for Content. The Purpose of preassessment of readiness is to find out what the students know and don't know to help plan your lessons to your specific students each year. Every year teacher's students are different. You may not be able to teach the same units the same way because of the classes readiness. At the beginning of the year and before new units it would be best to do a pre-assessment of the students to see what they know. The teachers should also give parents an evaluation at the beginning of the year because they know their child best. Planning and preparing for a class day is difficult, having these pre-assessments done will help you spend more time teaching students what they don't know and just refreshing them on what they do already do know. For example, if you are going to be starting a new unit in math, how to add and subtract. Just by asking the students "What does addition mean?", "What does subtraction mean" and, "Do they relate to each other?", the teacher would be able to know that the students had a good basic knowledge of the information and could start on application-based activities.

Doing pre-assessment before each unit could help teachers using their time teaching students new information and save time by not teaching them what they may already know with remediation. There are many examples of ways to determine the classes understanding of different subjects. They can be used with formative and summative assessments not just pre-assessment. Once the teacher has decided on the next unit of study they can have the students trace their hands on a piece of paper. On one hand they can write 5 things they already know about the subjects and on the other hand they can write what they wish to know about the subject. This can be done with partners or individually. Teachers can use this to

plan the unit and could also use it as another activity by having the students research and answer their own questions. Teachers can also create a worksheet or use note cards to have the students do as homework to get into the classroom the next day. Just asking them "What do you know about the topic?", "Is this topic interesting to you?". Another way is to give the class a test and go over the answers with them, allowing them to correct their own test and find prior knowledge. Using end-of-unit tests can be a great thing for the students; it helps them recognize the important parts of the upcoming unit. There are many ways to find out what students know about subjects that will help you better prepare and spend time wisely within the classroom (Rice, 2013).

#### **Evaluating**

Pre-assessment should always be evaluated but never with grades (Rice, 2013). Teachers should use checkmarks, symbols and highlighter to help find where the students need the most instruction. These assessments should be used to create teachers lesson plans and help the teacher find the best approach for the new unit. The best way to assess is to use graphic organizers, which will be described in greater detail below. Evaluation is an on-going process throughout the school year. As the students learn and grow so will their knowledge and abilities (Hall, 2002).

There was a study done about India curriculum and that evaluated the effectiveness of pre- and post- assessment. Overall the findings showed that pre- and post assessment had a positive affect on the students learning. The student had increase their average score 11% from the pre-assessment to post. In pre-assessment they were given a subjective method of asking what they already know or do not know about the subject. They also were given an assessment that was an objective method that asked yes/no questions. For example, was the information easy to understand, useful, and well organized (Jin & Bennur, 2012).

#### **Organizing Data**

Graphic Organizers may be the best way to organize the data from pre-assessment. Making a

prescription for differentiation sheet is a great way to do that. It incorporates all the data into four categories such as, Learning styles, multiple Intelligences, Interests and Readiness for content. Each student would have there own sheet filled out and can be used for planning lessons throughout the year. These are great for students who are bored, or unmotivated. These sheets can also be used for creating groups for the class and finding students that may work well together (Rice, 2013). Teachers must also organize their classroom management and delivery strategies to effectively operate a classroom with differentiated instruction (Hall, 2002).

#### Learning cycle

To summarize pre-assessment is a great way to start off the school year, whether it is a test or a worksheet is up to the teacher. For starting a new unit having it be a pre-test would be in the best interest of the students and the teacher. This way the teachers can use the same test for the pre- and post-assessment. This will allow students to know what will be on the test and also allow teachers to know what they need to spent more time on. One option you may decide to add onto the preassessment of a new unit would be a choice of "I do not know". Showing the student that it is all right to not know the correct answer. After the pre-assessment is complete teachers need to evaluate and organize that data, and create or adjust their lesson plan. Teachers may use the preassessment from the beginning of the year to create groups for projects or create a new activity based on the students interests. Once the students are taught and are ready to be assessed again the teacher may make a new test or use the preassessment again. Pre-assessment can be used in many ways and can be affective in any classroom if used properly.

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## A Learner-Centered Approach to Assessment

Isaac Castellano

Abstract: The focus in the classroom has steadily changed from a teacher-centered approach to a learner- centered approach. This allows the attention to be on the student's individual needs and is tapered to the best method for them to succeed with the immense, diverse backgrounds that are intertwined in schools today. There are many different approaches to how to do this, such as: small groups, intro exams, and different exam and retention methods. With all of the approaches, the focus is on the individual student and how well they are learning the material and retaining that knowledge for future use. The idea of learner-centered is applying to all levels of education and should be incorporated into all classrooms across the world to get the most out of upcoming generations.

Keywords: Learner-Centered, tapered, focal point, retention methods

#### Introduction

Classrooms across the United States have centered the attention on achieving excellence on the high-stakes tests that students, at a particular grade level, are required to take. With this focus around these certain tests, students are merely a number to educators as the focus for both educators and administrations is to achieve the highest scores possible. With this focus, students are becoming invisible to teachers as teachers are trying to force all students to conform to their one style of teaching as this is the only way, in the eyes of the teacher, to properly prepare for the standardized tests. To properly assess a student, the individual's background, heredity, talents, interests, and capacities must be taken into context and an individualized plan must be put into place for them to succeed.

#### **Changing the Focus**

The focus in the classroom has steadily changed from a teacher-centered focus, which is

how the teacher is able to portray the material and how well one does on the standardized tests, to a learner-centered focus, where the individual student's background, heredity, talents, interests, etc. are all taken into account to get the best results and retention out of a student. The focus now changes to what factors into an individuals' ability to learn: experiences, backgrounds, their heredity, perspectives, talents, interests, needs, and the capacity at which they can learn. The focus also changes to learning the knowledge and about how teachers can effectively explain and teach the lesson at hand (McCombs, 2000).

With the focus off of the teacher's ability to teach the topic and onto the student's ability to learn and retain the lesson at hand, students feel a higher connection to what the material is and to the teacher. As students start to retain the information and connect with the teacher, the student's motivation to achieve higher scores and to do well will increase too. As assessment has been put on high-stakes tests, switching the focus from teachers and educators need to achieve high test scores to the students' actual ability to learn (McCombs, 2000). With the focus switching from how teachers' are teaching to what the students are actually learning will allow a more relaxed atmosphere in classrooms and the promotion of actually learning instead of being on a strict schedule to meet.

With the student's motivation and retention going up due to the teacher's focus on each individual student and their individual background, now the focus of the material needs to be changed. This is a drastic mindset change as both parents and teachers need to understand what is best for their child/student to achieve the highest merits they can. As noted in, Learner-Centered Teaching: Five Key Changes to Practice, the focus needs to change from the amount of material the students are learning, to the type of material the students are learning (Weimer, 2002).

In many school districts across America, the focus is to get through as many sections of

material as possible because that is the way to prepare students for the standardized tests that awaits each and every one of them. But with a learner-centered approach, the material is broken down even further to allow the students to grasp the concept and to retain the knowledge for a longer period of time. Through this focus change, teachers, and parents, must be patient as the process develops; parents and teachers must encourage the process and aid in any misunderstanding so the student gets the most out of what is being taught. In the article, From teacher-centered to learner-centered curriculum: Improving learning in diverse classrooms. Education, teachers need to realize that their job as an educator is to educate the students that enter the door to their classroom every day.

In the majority, teachers need to realize that their focus is about the students' ability to learn, and not the teacher's ability to teach. adaptation from a teacher-centered approach to a learner-centered approach needs to be done by the teachers themselves as they are the ones who are learning the new techniques, new strategies, and most importantly, they need to know how backgrounds of an individual impact their success in the classroom (Brown, 2003). Teachers now have to switch the focal point off of them as educators and onto each and every student, as an individual. Teacher's role in the classroom is more enhanced to allow the students a chance to succeed, no matter their background, their talents, or their interests.

#### Switching the Approach

As the focus is changing from what the teacher is teaching to the entire class, to how they are teaching it to each individual student, a new approach needs to be developed for maximum success. The anxiety that surrounds changes is enough to put educators and administrators over the edge, so an effective and useful approach must be made to assure that the students' efforts and successes are able to achieve the fullest potential.

To begin the switch, teachers must buy in to the philosophy that the student's individual needs must be met to successfully grow and advance in the classroom. Next, the purpose of teaching must

change from memorization and bulk knowledge, to if a student as successfully learned and comprehended a certain area and comfortable and confident to move on in the specific area (McCombs, 2000). Teaching strategies in the past have been to teach at a specific pace to ensure that the material needed for the standardized tests is taught. The problem with this way of teaching, teacher-centered learning, is that some students excel while others are not comprehending the material and are set up to fail. After the student has fallen behind, their knowledge, motivation, and retention go out the door and they may give up on the idea of schooling all together.

The idea that "One teaching style fits all" is a thing of the past as our culture is changing and the individuals in the school system are changing as well, coming from more diverse backgrounds and cultures (Brown, 2003). If a fish was tested on its' ability to climb a tree, it will believe it has failed in everything it has done. This is the same concept that goes hand in hand with a "One teaching style fits all" as some students are hands on, while others learn best by just observing; no one way to teach a classroom is the correct way, but the teacher must be able to gauge what works for one student and what works for another.

As the teachers begin to figure specific strategies for each student, they can start taking a more personal approach to their classroom. As noted by Norman & Sopher, Learner-centered approach allows the teacher a more personal approach to hand-pick problems and lessons that fit a certain student and their interests, beliefs, and backgrounds (Norman & Sopher, 1996). Through this personalization aspect to the classroom, students and teachers can feel closer to each other as the student knows the teacher is trying and the teacher is beginning to see the student in their own light.

With problems built for a specific student, or a group of students, they can learn how to collaborate with each other and problem-solve to find the solution, which is being diminished in the school system in today's world. Students are told not to think outside of the box and just to learn the material that is right in front of them and that is it, but through learner-centered approach, thinking outside the box to problem-solve and determine the solution is encouraged. Through teaching students how to collaborate and think, they are learning skills that will translate into their future jobs and beyond.

#### **Gauging the Success**

Now that the approach has changed from teaching each student as one large group, to a more individualized approach, teachers can start implementing ways in how to gauge the success of the individualization. Through the process of learning, teachers can break the students up into smaller groups with students from similar backgrounds and similar interests. Through these small groups, the students can teach each other, with the help of a student aid or from the teacher, help each other, and evaluate each other. As noted by Weimer, "The evaluation process change[s]... No longer [does] faculty do all the evaluation... peers and learners themselves are involved in the evaluation activities. The ability to self-assess accurately and constructively judge the work of peers is an essential learning skill" (Weimer, 2002). With students gaining the skill of evaluation that teachers use to evaluate the classroom, they begin to see what is needed from a project or assignment and will gain more retention as they must know what they are evaluating before they can. Implementing peer evaluation will help assess if the learner-centered approach is an accurate tool. Another useful to help assess the learner-centered approach is to begin with a baseline test, which is the same for every student, and then immediately after, give each student a test that has hand-picked problems that are tailored to their specific interests and their prior knowledge. This will allow the faculty to see the difference between having a generalized test versus a test that is tapered to fit each individual student. After, compare how the class did as a whole on the test that was generalized for the entire class versus how each student did on their individualized test. The results should show that students are more likely to learn and retain

information if it is a topic that interests them and they feel connected to.

So through the few assessment options, I believe that every school in America should switch from the teacher-centered approach to a learner-centered approach to best prepare the generations to come for the world after schooling.

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### Use of Student-Generated Questions in the Classroom

**Emmett Dziuk** 

Abstract: Student-generated questions can be a very helpful tool in any classroom. Students create questions to help show their understanding and learning of a subject. These questions can be used in many different ways as teaching tools such as questions being created by students and then included as a part of exams, creation of questions to gauge interest in a subject and help direct what is learned or they can even be used to help review and practice for an upcoming exam or quiz. The use of student-generated questions has been found to promote learning and interest when it is implemented as part of the teaching curriculum.

**Keywords:** student-generated questions, teaching/learning strategies, active learning, summative assessment

#### Introduction

As a first time teacher there are many decisions that have to be made as a teacher enters into the school year and plan teaching strategies. One of the many important things a teacher must decide when creating and enhancing their curriculum is how will they assess and promote their students' learning. This in and of itself can be a monstrous task.

There are many different ways that a student's learning can be assessed and even more strategies are out there for promoting learning. Another important task that teachers must accomplish is finding a way to get students interested in what they are learning. The use of student-generated questions in education can be used to promote learning and interest in topics as well as be used to assess learning.

#### What are Student-Generated Questions?

Student-generated questions are questions created by students to help demonstrate their understanding of the material being covered. These are not simply clarifying questions that a

student comes up with when they are confused about a topic. These are often considered questions with specific answers based from the material, similar to ones that would be found on an exam or quiz. Various types of questions that can be created are multiple choice, true and false, fill-in-the-blank, short answer or essay questions. Student-generated questions can be used in a variety of ways. Some examples of possible use are questions being embedded into an exam or quiz, used as a helpful tool for practice or even used as a way to promote interest in the subject.

# **Incorporation of Student-Generated Questions** in Exams

In almost every classroom, the main form of evaluation for the material being taught is through exams or quizzes. However, researchers say: "Our education system has transitioned into a passive learning environment because of all the new technology available for distraction" (Sanchez-Elez et al., 2013).

Students now commonly sit in classrooms using their phones or listening to music instead of paying attention to the information being presented. This unfortunately sets up the too often typical cycle for students to cram before a test and then forget everything right after the test. Cramming may bring a passing grade, but it does not facilitate long-term learning. Student-generated questions can be used to help get students more involved in the process of evaluation (Sanchez-Elez et al., 2013).

The uses of these questions are also very easily integrated into a regular exam or quiz without much effort made by the teacher (Lam, 2014). This strategy helps promote involvement by creating discussions over what relevant materials should or should not be on an exam (Sanchez-Elez et al., 2013). It also provides motivation when students see that their questions are being used on their exams (Sanchez-Elez et al., 2013). Another morale booster about exams is that if each student creates a question and it is used on an exam then they

should at least know how to answer one question. This strategy can help create active student participation but unfortunately not all students may take creating student-generated questions seriously and therefore they may not benefit as much as other students who do actively participate (Lam, 2014). It was found in a study on this strategy that the students that used student-generated questions often had higher grades and that the students that were more involved in the process had better results on the exams or quizzes (Sanchez-Elez et al., 2013).

# **Incorporation of Student-Generated Questions** for Practice

Student-generated questions can also be used for practicing material. One article discusses the use of student-generated questions to help gauge and determine interest in certain topics (Davis, 2013). This helps to lead interest by getting students to ask questions regarding what they are curious to learn about and then covering what the students have shown interest in during the lesson (Davis, 2013). Using this strategy enables students to make connections to things that they are interested in as well as keep them interested in what they need to learn (Davis, 2013).

This article also found that using this strategy helps shift the classroom to a more learner-centered instruction rather than teacher-centered instruction which helps improve learning in the students (Davis, 2013). Davis (2013) also argues that this strategy creates a stronger connection between the student and the topic and therefore allows the student to better remember the material.

A study by Foos (1989) looked at whether practicing writing questions before an exam would be beneficial to students. The study had some students practice writing multiple-choice questions or essay questions and some that did not (Foos, 1989). It was found that the students that practiced writing questions before the exam performed significantly better than those students that did not practice writing questions at all (Foos, 1989).

The values of those that wrote multiple-choice versus essay questions were also compared and

there was no difference between those two groups and how well they ended up doing on the exam (Foos, 1989).

# Benefits and Concerns of Using Student-Generated Questions in the Curriculum

Unfortunately with every teaching strategy there are always some students that do not benefit because it is just not how they learn. This strategy, along with all teaching strategies, comes with some doubts and concerns as to how it affects and helps the students.

A possible downside to the use of student-generated questions is if it is relied on too heavily students could memorize all the questions and answers instead of learning and understanding the material (Lam, 2014).

Another concern raised is whether or not students can create questions that are actually of good quality. Contrary to what may be thought about the quality of student-generated questions, one study found that students were able to create questions that were equivalent to those created by teachers (Yu & Chen, 2013).

This study compared and contrasted using three test groups: one that created student-generated questions but did not practice answering them, a second group developed student-generated questions combined with answering teacher-generated questions and a third group that created student-generated questions and then answered these created questions (Yu & Chen, 2013). It was found that the most beneficial combination for learning for the students was the combination of student-generated questions (Yu & Chen, 2013).

These results are thought to be found because this allows for the teacher to balance the coverage over all the material covered by filling in the gaps that may be present in uneven coverage of student-generated questions (Yu & Chen, 2013). Using student-generated questions in the classroom has been shown to increase comprehension of material, increase motivation, increase positive attitudes about the material and promote active learning behavior (Yu & Chen, 2013). To gain the most from this strategy this

study recommends that student-generated questions be combined with regular teacher-generated questions to avoid memorization of material and uneven coverage of the material (Yu & Chen, 2013).

#### Conclusion

The use of student-generated questions is a teaching strategy that is often unheard of and The studies previously discussed underused. how student-generated questions could be beneficial if included as a part of the teaching curriculum. Student-generated questions can be implemented in various ways. Questions can be used for practice and review or alternatively can be incorporated in exams or quizzes. It can benefit students by promoting interest in the subjects covered and helping them connect the material to something for which they have a passion. The use of this strategy can also allow students to feel more involved in the evaluation of their learning when these questions are used in the exams and This strategy may not help every student, but it has been shown to help students that put a thoughtful effort into the creation of questions.

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## Summative Assessment: Best Teaching Practice

Emma Robinson

Abstract: This paper's purpose is to explain why summative assessment is the best teaching practice to implement in a classroom setting-whether that setting be in an elementary school, middle school, or high school atmosphere. Through extensive research and personal experiences, this paper will explore what summative assessment is, why it should be used, and examples of how to use it for different classroom settings.

**Keywords:** Summative, assessment, teaching practice

#### What is Summative Assessment?

In 2012, the Florida Center for Instructional Technology stated that summative assessment is, "...typically used to evaluate the effectiveness of instructional programs and services..." One thing to keep in mind regarding summative assessment throughout this paper is this type of assessment is product oriented (Dettmar&Hanna, 2004).

According to a survey given by Maddalena Taras in July of 2008, staff members within the education program at a non-specified English university had a few different rough definitions of summative assessment. The majority of the lecturers believe summative assessments are what we know as a final or cumulative exam. Taras states the definition of summative assessment in a different article written in December of 2005 as, "...a judgment which encapsulates all the evidence up to a given point." (pg 448).

The given point can be seen in the form of a midterm exam, final project, final test, or a final paper. I conducted my own survey asking a group of University of Wisconsin River Falls students what they thought summative assessments were. Most of them had no idea what a summative assessment was, which is ironic considering most of them have midterms coming up soon. However, for those who knew what a summative assessment was, the terms "final test" and "end

grade" were popularly said. UWRF student Paige Ciernia was one of the students who knew exactly what summative assessment was as she states, "Summative assessment is a way for teachers to know where their class stands in regards to a subject, whether it is given in test or paper form." Ciernia then went on to explain the difference between summative assessments in comparison to other assessments. She mentioned that summative assessment is concerned with the final product of what was learned during a period of time, whereas other forms of assessment are more so concerned with the process.

Another UWRF student who knew the rough definition of a summative assessment, Kaitlin Draganowski expresses, "Summative assessment is grade decider, usually a final test given at the end of a unit, chapter, or the entire year if it is cumulative." When asked if summative assessments were a good teaching practice, both students said yes. When asked if they believe summative assessment is necessary in classrooms, both students believe this teaching practice is a fundamental piece needed within school institutions in order to measure improvement and knowledge base in the vicinity of a classroom.

#### Reasons of Use

The practice of summative assessments fit in a large range of applicable uses. The Florida Center for Instructional Technology says this type of assessment is, "...typically used to evaluate the effectiveness of instructional programs and services..."

According to University of Cambridge's Wynne Harlen in June of 2005, summative tests can be used for a source of regular grading. With the ability to put grades in online, parents and students expect grades to be put in quick and efficiently. Olenka Bilash mentioned in May of 2009, "It is the summative assessment that is used to determine grades and future directions for students." Summative assessments are also used to get an accurate read on what students need to

improve on, which could ultimately help teachers update their curriculum to better fit the needs of students (Harlen pg1). If the majority of a class gets the same question wrong on a test, the teacher will know how to better their lesson plan for next year. Summative assessments can also be used in the form of high stakes tests to monitor school performance (Harlen pg1).

The ability to monitor school performance can help with creating a good curriculum. This type of assessment also encourages students to study, learn, and pay attention to the material they will be tested on. Speaking from experience, the classes I had summative testing in are the classes where I paid attention the most. Just the existence of summative tests in the classroom is enough to motivate students into listening a bit more to lecture, in comparison to a class where there are no tests, and just homework assignments.

Summative testing levels the playing field in an increasingly competitive academic and professionally fueled world. This pattern of testing provides a fair chance to all students and eliminates the politics often involved in academia. Summative assessments are completely unbiased, and all students have an equal chance to do well on it.

#### **Examples of Use**

There are many different ways to use summative assessment in one's curriculum; no matter what grade level he or she may be teaching. An effective form of summative assessment is a final paper. A final paper can be used to not only help students grasp the subject's concept, but with every paper a student writes, the better his or her writing get in general. As more and more states adopt the Common Core concept, skills like reading and writing are even more important to implement in one's curriculum.

A final paper can adequately be used for middle school and high school teachers. Obviously giving summative tests and papers are not always appropriate for the elementary level, but elementary school teachers can use an alternate form of a summative assessment- that of which being a final project.

Final projects analyze not only the knowledge a student has, but it puts students' creativity to the test. Creativity is important to implement in curriculum, especially with younger children. One could assign their class a final poster project, where they are able to portray what they have learned through pictures.

A midterm exam could be used to see where students are halfway through the course, and they will be able to focus on the academic areas they lack in during that period of time. With those areas in mind, they will know what they need to study in order to do well for the final exam. Final exams are important, as they are an indicator of what students know and do not know at the end of a unit or course. Teachers then will be able to adjust his or her curriculum accordingly.

#### **Pros and Cons**

Although I do believe summative assessment is the best teaching practice, it is important to identify and be aware as a teacher of the cons of this concept. One of the biggest consequences that come out of this teaching practice is test anxiety and low self esteem (J. Cassady & B. Gridley, 2005, pg. 6).

I have had bad test anxiety since my sophomore year of high school. Almost five years later I am still suffering from anxiety, however I do believe summative assessments are completely necessary. From my personal experience, taking summative tests always helped me stand out from others in my classes in a positive way. All of my teachers were aware of my situation, so they were aware of the hard work I put in to pass these summative assessments. I stood out from the kids who did not pay attention or study.

In regards to accumulating low self-esteem due to test scores, a positive to outweigh the negative is the excitement one will feel when they exceed expectations and do extremely well on final tests or papers. Parents love to see improvement, which is most easily measured by summative assessments. Test anxiety is considered a consequence of summative assessment, but a positive result came out of it. I learned how to effectively study and retain information, both great skills to possess. It is also

important to recognize that summative assessments are completely unbiased, and all students have an equal opportunity to do well on the assessments through hard work and determination.

#### Conclusion

Summative assessment is a type of assessment that tests students on a unit up to a certain point. Teachers use this type of assessment to create a grading system for their classes effectively and efficiently. As stated earlier in the paper, a summative assessment can come in the form of a final test, a midterm exam, a final paper, or even a final project. This type of assessment is used to measure what students know or do not know. Although this assessment is probably not a student's favorite teaching practice, it is a necessary evil, and is a very helpful reference to look back on when creating lesson plans as a teacher. Summative assessments are the best teaching practice because they are completely unbiased, helpful when looking at a school's academic improvement, and they encourage hard work from students.

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# .A Teacher's Guide to Classroom Assessment Techniques

Abstract: Assessing students' progress and development as learners is an important element of teaching. As a teacher, one must also be able to reflect on one's teaching methods and thereby modify them to best fit the students' needs. The use of classroom assessment techniques can help achieve both of these goals. This paper will address the purposes of using these techniques and the benefits they offer for both students and teachers. Also included are brief descriptions of several classroom assessment techniques for current and prospective teachers to consider experimenting with in their classrooms.

# Keywords: assessment techniques, formative, feedback, strategies

The incorporation of classroom assessment techniques is an age-old concept that teachers have been using for years. Whether a teacher uses a technique that they learned in training, or simply a strategy they conjured up on their own, the need to know if their teaching is being successful and the desire to understand students' comprehension is instinctive. Despite this innate characteristic among teachers, the first real attempt to document such techniques for teachers didn't appear until 1988, when K. Patricia Cross and Thomas A. Angelo published "Classroom Assessment Techniques: A Handbook for Faculty". This handbook (and its later editions) has since become a major resource for all other research concerning assessment strategies within the classroom due to its extensive studies and thoroughness.

#### What are classroom assessment techniques?

Classroom assessment techniques, or CAT's as they will commonly be referred to in this paper, are strategies teachers can use to gauge how well their students are comprehending and understanding important points during a lesson. The idea is for CAT's to be a formative approach

to assessment, meaning teachers are using the evaluation of students' learning to modify their own teaching plans. These techniques are completed during class time and are usually unanimous, although they do not have to be. There has been some debate in the past over whether or not the activities should be graded. While many scholars believe CAT's should be ungraded because students may answer more honestly, others have found that students regard the activity more seriously if it is being counted, even if it's a very small part of their overall grade (Mihram, n.d.; Enerson, et al, 2007).

There are two main purposes for choosing to use CAT's in one's teaching practices. The first is to provide "quality assurance" for students' education (Leahy, et al, 2005, p.19). By providing feedback on students' learning, the techniques allow teachers to make adjustments throughout the lesson so that they are being effective teachers. Secondly, CAT's allow students a chance to see how they are progressing over time. Along with that, it shows students that their feedback can make a difference in what and how they learn, which in turn could lead students to take more ownership of their education (Mihram, n.d.; Leahy, et al, 2005).

#### Benefits of CAT's

There are several benefits to implementing these techniques into the classroom. Teachers gain insight into which concepts their student's understand the best and which ones are most confusing. They can then use this information to decide when there needs to be more instruction, and when the class is ready to move on to the next topic. In this way, teachers are able to meet the needs of their students most effectively. These techniques can also help teachers understand the ways their students learn the best as well as alert teachers when a certain teaching approach is not working very well. Students have also reported that they feel more involved in the learning process when these techniques are used in the

classroom because it requires them to focus on what they're learning – they become active participants rather than passive learners (Mihram, n.d.).

Other benefits include flexibility and timeliness (Mihram, n.d.). Many of the techniques, although not all, can be used in a variety of ways. They can be adapted to fit large or small class sizes, or modified depending on what subject matter is being taught; they can be used to assess student's recall or critical thinking skills. Also, CAT's require very little time, if any, to be set aside - most of the activities can be conducted while regular instruction time is taking place. That being said, although the time needed to administer the assessment is minimal, it does require careful thought beforehand, as well as a lot of consideration afterwards to analyze the data that's been collected.

#### Tips for implementation

First and foremost, only choose the technique(s) that appeal to you. As the classroom teacher, you are best equipped to decide which strategies align with your teaching methods and the structure of your classroom. Don't try to force it - this will only make your job harder and it will not prove beneficial to you or your students. Along these same lines, if you have never used any of these techniques before, begin by trying only one at a time. This allows you to fully develop the technique in your classroom and figure out what works and what doesn't. If you attempt to take on several CAT's all at once, you may become easily overwhelmed and find that each technique is only being conducted halfheartedly (Angelo & Cross, 1988).

When to do a CAT is also a critical question to discuss. Some techniques lend themselves nicely to be used in a consistent manner. In these situations, frequent usage is advantageous in that it helps students see their own progress; it shows students that their teacher is invested in their learning; it provides the teacher with regular feedback so they can continually adjust lessons and teaching methods; and it helps students feel like they have control over their education (University Teaching and Learning Center

[UTLC], 2008). However, this is not the case for every CAT. Some techniques work best when used sparingly – only once at the beginning, middle, or end of a lesson, or simply once a week. Trying to use these activities too often may make them seem more like burdens and less like tools. Whatever the case may be, it is suggested to do a CAT at least once before students have a test or weighty assignment in order to address any issues students are struggling with (UTLC, 2008).

Lastly, it is important to maintain an open line of communication with your students throughout the entire process. Before doing a CAT, talk through the purpose of it with your students to make sure they understand what you hope to learn from it and how it will benefit them. Afterwards, once you have had time to sift through their responses and feedback, inform them about what you found and explain how it will be used to make things better in the classroom (UTLC, 2008). Without explanation, students might view CAT's merely as busy work. This could cause them to become disengaged and consequently affect the quality of their feedback in subsequent assessments.

#### Suggested techniques

Below is a list of four strategies that can be easily adapted to fit various classroom structures and teaching styles. While this list is not exhaustive – there are over 50 CAT's that have been tested and reported by Angelo and Cross – I think it is a good place to start for beginning teachers.

#### **Background Knowledge Probe**

The Background Knowledge Probe consists of a few simple questions (and perhaps a couple focused ones) asked typically before the start of a unit or when introducing a new important topic. The purpose of this questionnaire is to inform the teacher of how much prior knowledge students have on a specific subject matter. This will help the teacher figure out an "effective starting point" for the lesson as well as an "appropriate level of instruction" (Mihram, n.d., p. 3; Angelo & Cross, 1988, p. 37). While this strategy is most often used as an introduction to a lesson, it can also be

beneficial halfway through and at the end to see what the students learned (Mihram, n.d.). This particular technique can be easily modified to fit any subject matter – history, science, math, English, music, and so on. An example of one question that might be found on a Background Knowledge Probe questionnaire would be: "Explain what you know about the Louisiana Purchase?"

#### **Memory Matrix**

This technique specializes in assessing recall and ability to categorize things based on their relationships to something else. A Memory Matrix is composed of rows and columns with headings and empty cellblocks (Figure 1.). Students are then instructed to fill in the grid according to what they learned. As in the example, students would fill in the compose that fit into each category. This is most helpful at the end of a lesson in which students are asked to remember a lot of key concepts, such as in music, history, and the sciences (Angelo & Cross, 1988). The teacher then analyzes the completed grids, looking for common mistakes so as to understand what concepts students are struggling with from this point, the teacher can decide how to address this issue (UTLC, 2008).

|           | Germany | France | Britain |
|-----------|---------|--------|---------|
| Baroque   |         |        |         |
| Classical |         |        |         |

Figure 1. Memory Matrix Example

#### **Traffic Light Cards**

This technique is exactly what it sounds like. The teacher simply distributes one red card and one green card to each student. Then, during the lesson while instruction is taking place, students can hold up either card to show how well they understand. If the teacher sees his or her students holding up all green cards, they know to continue. But if the students are holding up red cards, the teacher knows that something was unclear and needs to be discussed further. This type of immediate feedback is helpful for the teacher to see how well students are learning and it also gives the students an opportunity to engage and take control of their learning. This technique is

typically practiced in elementary classrooms although it can also be effective in the upper grade levels (Leahy, et al, 2005).

#### **Muddiest Point**

The Muddiest Point is another general CAT that can be used for any subject in any grade level. When using this technique, the teacher instructs students to briefly state what part of the lesson or assignment was most confusing for them. This allows the teachers to figure out what material needs to be reiterated. Reviewing every area that each student felt was unclear is a lot of work, and teachers may find themselves simply teaching the entire lesson all over again. As an alternative, I would recommend looking for the top two or three most common responses and focusing on those. This technique also requires students to learn how to "articulate their confusion", a skill that is very important to have.

#### Conclusion

As a teacher, you must be willing to constantly change and adapt what you do in the classroom; it is simply the nature of the profession. If you remain stagnant - unwilling to modify lesson plans and teaching methods to adhere to students' needs - you inevitably run the risk of becoming highly ineffective. However, this can easily be avoided by taking the time to assess both yourself and your students. And one simple way to collect the feedback you desire is to engage in the use of one or more classroom assessment technique. Not only do CAT's help you determine the level of your student's understanding and your own effectiveness as a teacher, but they can also directly benefit the students themselves. This paper included four CAT's that I felt could be easily implemented into any classroom. Nevertheless, if upon trying each one you find that none of them seem to be the right fit for you and your classroom, do not despair. There are plenty more CAT's that can be greatly beneficial and worth trying, and I implore you to experiment with these other techniques as well.

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# Discussion in the Classroom: Why to Do It, How to Do It, and How to Assess It

Samantha Corcoran

Abstract: Discussion in classrooms makes learning more interactive and helps students develop skills that cannot be taught in a traditional lecture format. Large group discussion is not a perfect teaching strategy and neither is small group discussion, but there are things educators can do to improve the practical usage of discussion in the classroom. When it comes to assessment, there are many options for the educator to choose from. The best choice depends on what would be most beneficial for the students.

Keywords: large group discussion, small group discussion, assessing discussion

#### The Benefits of Discussion

Increasing how much students actively participate in the classroom increases the students' enjoyment of the class and their retention of factual knowledge. (Costa et. al, 2007). A study was done on undergraduate medical students. Two groups of students took the same class. They covered the same information and took the same tests but one class was taught following a traditional lecture format while the other consisted of open discussion sessions. The medical students who were in the discussion group enjoyed the style of teaching more than the students in the lecture group and test results show that interactive teaching practices increase knowledge retention (Costa, et. al, 2007).

Discussions help students develop and strengthen interpersonal communication skills as well as analytical and critical thinking skills. Research shows a positive correlation between the quality of classroom discussion and the how well students understand what they have learned (Murphy et al, 2009). It also suggests that improved discussion in the classroom will help students build better problem solving skills (Murphy, et. al, 2009).

Discussions help to summarize what students have learned and strengthens conceptual and procedural knowledge. When students have problems understanding something, having a discussion makes it clearer to both the teacher and the student exactly what the student is struggling with and then the teacher can address the problem and fix it (de Garcia, 2013). There are lots of benefits associated with the use of discussion in education, yet it is not something that enough teachers take advantage of.

# Problems and Solutions for Facilitating Discussion

A whole class discussion can be a wonderful tool when used correctly, but it is not always the best strategy to use if the goal is to get every student to talk. Large group discussions have certain downfalls when it comes to getting students to talk. Many students are not comfortable speaking in front of the whole class. They are worried that they will make a mistake and embarrass themselves in front of their peers. Students who are shy or less confident may not contribute at all (Jing, 2010).

These problems can be addressed in several different ways. First, there are things educators can do to make students feel more comfortable. People often feel more comfortable when they know the other people they are talking with. "For rich discussions, the emotional environment of the classroom must be safe" It is when students feel safe that they are willing to share and discussions move past the surface level. (de Garcia, 2013) Group bonding or introductory games might be one way of making students feel more comfortable.

Another thing to get students to talk is to put them in smaller groups. In smaller groups student participation tends to be spread out more equally among group members than it is in a larger group. In a full class discussion only one person can speak at a time but when a class is broken up into smaller groups a student from each group can be speaking at any given time. That way more students get the opportunity to speak in the same amount of time (Jing, 2010).

Students who are uncomfortable speaking in front of the whole class might find a smaller group less daunting. If they can speak with the smaller group it may help students gain the confidence to speak in front of the whole class. Think-Pair-Share is a discussion strategy that combines both small group and large group discussion. When given a question students think for a moment then break off into pairs or small groups. They discuss in the small group and then share with the class. If a student is nervous about talking in front of the whole classroom, Think-Pair-Share allows them a chance to practice before talking to the whole class.

#### **Create Better Discussion**

There are other things the teacher can do to help the discussion go smoothly. If the teacher is leading the discussion it is important to wait. All too often teachers do not give students time to answer before they answer their own questions. The wait time after the question is asked gives students time to process the question and come up with an answer. (de Garcia) Whether a classroom has a chalkboard or a dry erase board, having individual students write their ideas on the board gets the students involved and creates a public document to look back and reference to during the discussion. A teacher could ask a student to lead the discussion or have the students continue the discussion by calling on other students after they speak.

Another thing to improve a discussion is for the teacher to move out of the students' immediate sight. By sitting in the back of the classroom during the discussion the students are forced to focus on each other. If the conversation still lulls then the teacher steps in by asking follow up questions to get the students talking again. Perhaps guiding the discussion every now and then the teacher can just let the students build their discussion on their own. At the end of the discussion, summarize what was talked about. This provides another reminder of what material was covered as well as makes the students feel like their contribution matters.

#### **Strategies for Assessment**

So now the students are talking but what's the point? All too often students judge the importance of assignments based on the number of points or

the grade percentage it is worth. If something is not being graded students might see it as something unimportant. This becomes a problem when it is time to assess group discussion. Another Problem is that group discussion teaches skills that aren't easily assessable. Some forms of assessment are more commonly seen in the classroom. There are many well-known assessment strategies for problem solving and knowledge acquisition but discussion assessment is not as well known. (Alozie, Mitchell, 2014)

It is much more objective than did a student get the right answer to a math problem. When people are talking about important things they tend to have opinions. When they have opinions emotions can get riled up in a moment. Part of a discussion is learning to keep calm and how to deal with a situation where others are upset. Discussion also teaches students to consider the points of view of other people.

This provides a bit of a dilemma when it comes to assessment. If nothing is assessed students might see the assignment unimportant, but if too many things are assessed, students might see the things being assessed as meaningless. Traditional assessment is extremely competitive and individual but discussion requires multiple people working together. If students are competing against each other they will not be able to work well as a group. The assessment needs to encourage the quality learning of material while at the same time discouraging undesired learning practices. Assessment should encourage students to think deeper about what they are studying and discourage them from short-term memorization for tests.

In group assessment students are not judged by their own efforts but instead judged by the collective work of the group. This form of assessment takes the pressure off of induvial students but allows for people who do little work and still get a good grade because the rest of the group picked up their slack. Students can become very upset when somebody else is getting credit for what they see as their own work.

Peer assessment is another option. With peer assessment students grade each other. Peers provide a unique form of assessment that can be very useful when used correctly. The problem

with peer assessment is that when one student gives another student a bad grade that student knows it was one of his peers who graded him. It can breed distrust among a group that is supposed to be working together. Peer assessment has been shown to be valuable when it is not graded but simply used by an indivual to make their own assessment and improvements.

Finally, negotiated assessment is a form of assessment in which all parties involved in an assignment agree on how the assessment should happen. It involves a discussion of what the intended goal of the assignment is, how the assessment is recorded, and what criteria are being assessed.

These are just a few forms of assessment that have been applied to discussion in the past. Each form of assessment has flaws but they assess different things. Depending on the assignment and the assignment goals one form of assessment might be better suited. There is no perfect assessment method. Sometimes no assessment is the best answer. It all depends on the situation and what would be most beneficial to the students.

#### Why is This Important?

Discussion is a tool to be used in the classroom. When it is used correctly it increases students' enjoyment of the class and strengthens students' understanding of concepts. It is a tool that needs to be used correctly in order for it to help all of the students in a classroom. Educators can vary group sizes and activities before discussion. During the discussion it is an educator's job to let the students discus and when it comes time for assessment there are different strategies for different situations. Discussion is a tool that should be used in the classroom

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## Testing Accommodations for Kids with ADHD

Sara Stewart

Abstract: The number of children diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) is rising every year. These children may show symptoms of hyperactivity, impulsivity and inattention. This makes it difficult for these students to focus during class and especially during tests. Allowing accommodations for these students while testing is a good practice. Accommodations include allowing the students to take the test in a private room, extending the test time limit for students, and providing students breaks between each test section. Fortunately, allow for such standardized tests accommodations as long as a student submits an application for receiving these accommodations and it is approved before testing time. This practice should be utilized within the classroom for students with behavioral disabilities such as ADHD. It gives them a fair chance to perform at the same level as their peers, and levels the playing field for all students.

**Keywords:** ADHD, Standardized Testing, Testing Accommodations, Assessments, Scores

#### Introduction

Attention all teachers! You will have kids with learning disabilities in your class and for them to learn like the rest of your students, you will have to make accommodations to help them succeed. These accommodations can be easily implemented and will increase their likelihood of success.

Today, about 11 percent of America's children are diagnosed with ADHD and that percentage is increasing every year (Center for Disease Control and Prevention, 2015). Their disability prevents them from testing in the same way as everyone else. Symptoms of ADHD include hyperactivity, inattention and impulsivity; all of which disrupt the child's learning. These children may have trouble sitting still for long periods of time, lack focus, are easily distracted, or may be disorganized, (WebMD, 2015) which affects how well they perform in school and when taking assessments. Timed tests and more specifically pre-college assessments like the SAT and the ACT,

especially are a problem for these students because of the rigid time and testing environment requirements.

#### **Testing Accomodations**

Both the SAT and ACT tests contain different subject sections, all of which have a specific time limit. For example, the ACT allows 45 minutes for the English section, 60 minutes for the math section, 35 minutes for the reading and science sections and 40 minutes for the optional writing section (The ACT, 2015). The average student is able to complete the ACT under these times restraints. However, if lack of focus or being distracted easily are weaknesses that a student has no control over, taking the test with the same time restraints as other students may be very difficult for them. This could seriously affect a student's future, especially since their score on the ACT or SAT plays a huge role in what colleges a student will get accepted into.

"Researchers found that those with the most severe symptoms had standardized test scores between 8 and 10 percent lower than the average" (Thompson, 2015). Luckily for kids with ADHD, they are allowed to send in a request for accommodations for these assessments that include extended time limits, break time between each section, and taking the test in a private room distractions (Thompson, Fortunately, "the ACT approves about 92 percent of applicants, and the SAT about 85 percent" (Moore, 2010). These accommodations necessary for helping these students have a better chance of earning the same scores and having the same opportunities as their peers.

Yes, medications will help eliminate some of the symptoms that children with ADHD have but sometimes they don't always work or have side effects that the kids have no control over. That is why exact precautions need to be taken to help give these kids a fair chance at succeeding. The three most popular accommodations that can be implemented are easy and should be practiced in schools and testing situations. Extending the time limits, allowing students to take the test in a private room, and providing breaks between the sections of the test are great ways to help these kids out. All three are described in detail below.

#### **Extending the Time Limit**

One useful tactic that could be used to help these students is extending the allowed time that the student has to take on the test. These students tend to waste some time during test taking due to their lack of focus and that they can be easily distracted. Both are out of their control and they shouldn't be penalized for this behavior. If these students have studied for the test and know the information, it shouldn't matter how long it takes for them to tell you what they know; it should just matter that they know the material.

Students experience test anxiety with timed tests in general; think about how nervous these students are who physically can't focus. Giving these students more time allows them to relax and therefore be better able to focus on the test. Multiple studies have consistently concluded that "the accommodation of extended time improved the performance of students with disabilities more than it improved the performance of students without disabilities" (Sireci, Li, & Scarpati, 2015). This tactic has been tested and studied multiple times with the same conclusion showing that it is an effective way to help students with learning disabilities, especially students with ADHD. Extending the time limit is one accommodation that can help students, but there are other accommodations that can be helpful as well.

#### Taking the Test in a Private Room

Letting someone with this disability take a test in a private room with less distractions is another great way to help them succeed. Using this tactic eliminates most distractions for the student (including other students in the room, most classroom noises, and possibly posters and other objects that could be hanging on the classroom walls).

Teachers would appreciate this accommodation as well because there is less of a chance that the students could cheat. Plus, they wouldn't have to extend the time of the test if that is something they would prefer not to do. Allowing a student with a learning disability to take a test in a private room also does not affect the validity of the test (Phillips, 1994). If taking a test in a private room that eliminates distractions and

doesn't affect the validity of the test, while showing results of better test scores from individuals with ADHD, then there should be no reason not to use this strategy.

#### **Taking Breaks between Sections**

Taking breaks between test sections would be helpful for these kids as well. During the ACT for example, one break is allowed after the English and math section and another break given after the reading and science section (if the student is doing the writing section as well) and that is it. Sitting for two hours straight at a time is hard for the average human being let alone for someone who has ADHD. This break time will allow their brains to take a little breather and be able to lose focus for a short time so that they can be recharged and more ready to start the next section. Thankfully, if a request is submitted and approved, a student with ADHD can receive extra break time between the sections which is very good news. Students with ADHD should be encouraged to ask for this accommodation.

#### Conclusion

These practices are very helpful to implement in your future classroom. It is very important to make these accommodations for children with this disability if they are to be given a fighting chance at achieving at the same level as their peers. By extending the time limit, letting the student take the test in a private room and having breaks between each section of the test, you aren't giving that disabled student an unfair advantage unless they don't actually need it.

If a student has ADHD and their medication works for them or they have learned how to help themselves focus better then obviously they will not be needing these accommodations. But if one of your students with ADHD is struggling, have a conversation with them and discuss if they need any of the accommodations to help them better succeed. A teacher's job is to help their students succeed and if someone in their class has a learning disability, then they should do everything in their power (within reason) to help those individuals learn to the best of their ability.

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# Montessori Approach vs. Traditional Approach to Assessment Taylor Vlasak

**Abstract**: The Montessori approach has more effects on children's academics then the traditional education programs. The absences of assessments and learning at the individual child's pace is extremely crucial for a child from infancy to 8th grade.

Keywords: Montessori Approach, Assessments, Traditional education

#### Introduction

There have been many studies completed to change and create the "best" assessments for children in the United States. These assessments are made to help educators know whether or not the student is on the right path for education success. The question I keep asking myself is if studies keep changing the assessments and can't seem to find the perfect way, why do them at all? Why not just assess the students based off of progress seen in a day-to-day school class room? Why not take the Montessori approach over assessment approach? Though out this article I will be sharing with you the method of Montessori education, the different effects the Montessori approach and traditional education programs have on children, and finally the impact Montessori has had on children with mental disabilities.

#### The Method of Montessori Education

The Montessori Method has been around since 1907. Maria Montessori created the first Montessori school, she was determined to serve children who were economically disadvantaged, as well as children suffering with mental illnesses. She wanted to create a more open minded based schooling for kids that were having a hard time meeting the standards that where created for their education level. According to the Journal of Research in Childhood Education, Maria Montessori's work included development of different education methods and materials based

on how children learn (Lopata, Wallace, & Finn, 2005-05). She was more focused on giving each individual a chance to grow into their own potential. Montessori programs slowly started to emerge in the 1990's in the United States. Montessori programs are found in a variety of different settings. There are about 4,000 private Montessori programs and more than 200 Montessori-styled public schools for students from infancy to 8th grade (North American Montessori Teachers' Association, 2003). It didn't take very long for Maria's success to spread and to this very day we are using her technique to benefit many children's lives.

According to Ryniker and Shoho (2001), the Montessori approach is based on the fact that children learn the most effectively when information is developmentally appropriate. The overall approach is to allow the children's natural tendencies "unfold" in a designed manipulative contain self-correcting environments that materials (Journal of Research in Childhood Education, 2005). Every child is a different person and Montessori based schools want to bring out that individualism and give the child a chance to learn when they are willing to, rather than forcing them to learn. When a child gets into this period of eagerness to learn a skill and information the work will be ready for them in the class. Also the child has higher chances of not only enjoying learning, but also remembering the material a lot better.

The main purpose of the Montessori approach is to engage a child's inner pace of learning, and providing manipulated objects and lessons for them when they feel engaged and willing to learn. As Montessori teachers have multiple ways of observing the child's growth over the year thought out these different manipulated self-taught lessons. Montessori schools don't use work sheets, assignments and tests. "Children are born mindful and with wisdom we can keep this skill alive: Montessori is wonderful in this way (Dalai Lama)." This quote is very important and sums up

the Montessori Method nicely. Through this quote it shares how each child is born with their own thoughts and minds full of wisdom, and through the Montessori approach they are able to give the child the chance express how and what they think, keeping their mindful brains alive. With the Montessori approach they are able to use the child's mind and guide it in the right direction, towards success.

#### Montessori approach and traditional education

Montessori and traditional education programs are different in many different ways, including physical environment, instructional methodology, and classroom attitude. In the Journal of Research in Childhood Education it gives an example how a Montessori class room is set up in more of a welcoming and open concept in which desks are arranged in small groups of four, "rafts", to promote individual and smallgroup learning. Whereas traditional classrooms have desks oriented in one direction, so the whole group's attention is focused to the front where the teacher is teaching the lesson to the group as a whole (Lopata, 2005-06).

In Montessori classrooms there are many different self-selected, individual and small-group work that the child can choose from each day. The work that the child can choose from is manipulative materials designed by Montessori as an instructional methodology. Over time the teacher observes and records the child's progress. This doesn't just give the child a friendly, nonstressful testing environment, but also allows the student to make progress at his or her own pace. The traditional education programs have been identified as having a greater emphasis on dispensing and delivering the information to the group of students as a whole. The teacher makes use of presentation aids, using a more lecture approach. This isn't beneficial, due to the children all being at different academic levels and may not be as interested in the presentation topic. This creates a teaching environment that doesn't have much of a positive effect on the child's progress (Ryniker & Shoho, 2001). Another instructional difference that is distinct to the Montessori approach is that it does not use

textbooks, worksheets, tests, and grades, like other traditional class rooms would use.

Differences in classroom attitudes management also have been noted. According to the Journal of Research in Childhood Education (2005), "Montessori classrooms are based on cooperation, while traditional classrooms are based on competition". Montessori teachers promote inner discipline in children by letting students direct their own learning, rather than upholding an outer discipline where teachers act as authorization, by dictating to students how to behave and what to do, that may occur in a traditional education program. In addition to teaching and providing a "guide line" children, Montessori programs target development of "human potential".

Over all the Montessori based technique is more based off the students and giving them their own way of learning, whither it is in a small group, alone, or with little assistance from the teacher it has been studied and shows that it has had more success in the class room. According to the article Evaluating Montessori Education, the student-chosen work in long time blocks, the absence of grades and tests, and individual and small instruction has shown effectiveness in both academic and social skills. These positive elements are supported by research on human learning (Lillard & Else-Quest, 2006). The study took place in Milwaukee, Wisconsin with a random selection of Montessori students and traditional students. All the students were at the age of 5 and they were given three cognitive/academic tests which measured academic skills related to school readiness. Examples of what these tests consisted of was letter-word identification, phonological decoding ability of words, math skills, and basic vocabulary. In the results the Montessori students achieved higher scores in all the categories except for the basic vocabulary, in which the two groups of students scored that the same (Lillard & Else-Quest, 2006).

#### Impacts on Children with metal disabilities

Since the Montessori approach is based more off of the child's willing to learn and allowing

them to learn at their own pace, this makes it a lot easier and less stressful of students that may be suffering from a mental illness. As Joyce Pickering states, in her article about Montessori and learning differences, dyslexia and other related learning disabilities are caused by anatomical differences in the brain, and in these situations a child needs to undergo a different program in the preschool. When a student has a disability they are recognized as different and has to go through school being pulled out of their day-to-day classes for extra classes to help with their disabilities, and this can be hard on those students, not having a regular schedule like the other students, or even to the point of feeling as if they don't belong. This is where the Montessori approach has brought a new success level to this disabled students. As stated in the previous section the students learn at their own pace, and aren't faced with the pressure of fixed tests that children with disabilities are faced with in traditional education programs. "These children are gifted with knowledge just like any other child is, it just takes an extra hard effort for them to apply the knowledge (Pickering, 2003-13)." Montessori gives these students a chance to feel equal to all the other classmates and still get to grow academically at their own pace and not have to undergo the stress of not understanding or belonging.

#### Conclusion

The Montessori approach is a lot different than the traditional approach and I strongly believe it would be more beneficial in the long run for children's education. There would no longer be any more disputes over assessments and teachers would have a better understanding of not only where the child academically places, but also what drives a child internally to succeed. The method, differences and the impact of children with disabilities is enough for people to take a second look on how children should be assessed from infancy to 8th grade.

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# Enhance Student Learning through the use of Rubrics Alice Darling

Abstract: This article is about how scoring assignment and project rubrics can enhance student learning. Scoring rubrics provide guidelines for how students are supposed to do certain assignments. Through all students being given specific scoring guidelines, students are able to know exactly what is expected of them and refer back to them as they make progress in their assignment or project. Teachers also benefit from rubrics, as they take away any claims that expectations were not given to students. This article will describe how scoring rubrics allow students are able to gain confidence in the classroom, have scoring transparency between student and teacher, increase consistency in scoring, and facilitate peer-assessment and selfassessment.

**Keywords**: Rubric, scoring guidelines, transparency, scoring consistency

In academic terms, a rubric is a standard of performance for a defined population. By using rubrics, teachers are able to communicate with students what their expectations are and how they will be graded. A common reason that students are not able to successfully complete assignments is that the expectations are lost in translation between teacher and student. Popular arguments against rubrics include that they block the creativity that students would have if they weren't given guidelines for assignments or that it encourages students to do the bare minimum of each assignment. Though these arguments may have some truth to them, it is incredibly important to give students guidelines for what is expected of them, especially in the STEM classes. With rubrics, teachers are able to give students a physical copy of what is expected of them for specific assignments. Rubrics cause transparency for the way teachers score assignments, consistency for scoring, and facilitates peer-assessment and selfassessment.

#### **Rubric Attributes**

A common rubric can set expectations for students. Teachers may create rubrics in order to organize their expectations for students as well as to organize the scoring for particular assignments. A simple rubric includes criteria, levels of performance, scores, and descriptors (Poor). Rubrics can be holistic or analytic. Holistic rubrics provide a single score based on an overall impression of a student's performance on a task. Holistic rubrics are good for quick scoring and provide an overview of students' performance, but unfortunately does not provide details in the feedback. Analytical rubrics provide specific feedback. Analytical rubrics are good for providing detailed feedback and can be more consistent across students and graders, but is time consuming for the graders (Zimmaro, 2004). Both types of rubrics, holistic and analytical, can enhance student learning, but to maximize consistency of scoring and feedback for students, analytical rubrics should be used. Though analytic rubrics are more time consuming for the teacher, analytic rubrics are important for students because of the detailed feedback that they get and the consistency for scoring between teachers and students.

#### **Using Rubrics for Scoring Transparency**

Rubrics also allow transparency in a teachers grading policy. When given a rubric, students know exactly what is expected and how things are scored. It is important for a teacher to let their students know how they will be graded so students can set expectations for themselves as they are doing assignments or projects. It is crucial that rubrics are given to students at the same time that the homework is assigned. Students will be able to refer back to this as they are making progress on assignment, especially on projects. Class projects often are spread among several weeks or months, not only will rubrics help students know what they are expected to do, but they can refer to it to know how much each part of a project is worth. By knowing how much each part of a project is worth, students can time manage better by spending more time on parts

that are worth more and less of parts that are not worth as much in the total grade of a project. Unfortunately, no rubric can stop students from complaining about certain expectations they are given, but it can stop students from saying that they didn't know what was expected.

Using rubrics allows students to know exactly what is expected of them. Rubrics can be used for daily assignments, projects or even exams. There can be miscommunication when a teacher is trying to describe an assignment so when the student goes home, they can refer to a rubric to know what they are supposed to do. When students stop paying attention in class, they often do not do the assignment that was given to them, claiming they did not know what to do, but with a rubric, students no longer have the excuse that they did not know what to do. Teachers can also benefit from having scoring transparency. When there are set expectations for every student, and those students know those expectations, it allows for the teacher to dismiss any claims from students that they were unaware of the assignment requirements.

#### Using rubrics to improve grading consistency

Using rubrics can increase consistency in grading. A rubric can be seen as a regulatory device for scoring. One could say that scoring with a rubric is more reliable than scoring without one. (Jonsson & Svingby 2007) While assessing students work, rubrics can be a useful tool for keeping consistency between the scoring of the same assignments among different students. If a teacher has the scoring guidelines in front of them as they are grading assignments, it is simple to compare what students expectations were against the finished student assignments.

Using rubrics can also keep scoring consistent over different departments in schools. Commonly, the same classes can be taught by different teachers. A rubric has specific guidelines for what is expected and gives quantitative guidelines for how to score assignments. Individual teachers may have different grading policies, but by using the same guidelines, scoring can become consistent between multiple teachers. Agreement on the important qualities of student's products can allow more consistent evaluations since the performance criteria do not vary from teacher to teacher. This can increase teacher and

student confidence. (Arter & Mctighe, 2001) Rubrics can also improve the way teachers collaborate to collectively make a rubric. Teachers must come together to decide what is expected of their students.

# Using rubrics for peer-assessment and self-assessment

Rubrics can offer the opportunity for peerassessment. After students finish projects or assignments in general, the teacher can disburse the assignment to different students to compare the assignment to the rubric. With specific guidelines right in front of them, students can grade other students with less bias. Teachers can allow students to grade other students since there are specific guidelines and instructions for how to score the assignments. It is advantageous for students who learn how to give and receive feedback (Jonsson, Svingby 2007).

Rubrics also offer the opportunity for selfassessment. Not only will students be able to selfassess their progress on assignments by referring to scoring rubrics, but they will be able to use rubrics to score themselves on their finished assignment. Teachers can assign students to look over their assignment and compare it to the rubric guidelines and give themselves a score. Rubrics can help close the gap between studentassessment and teacher-assessment. Students are more likely to be true with their assessment on themselves than they would be on peer students, since students would be harder on themselves than others. Students can gain life skills such as self-reflection and following guidelines by using rubrics.

#### **Enhancing student learning**

Rubrics can enhance student learning. When students are made aware of the rubrics prior to instruction, they know the level of performance that is expected and can become more motivated to learn and reach those standards. Rubrics can make the targets of instruction clear, especially for problem solving, group process skills, and writing (Arter & Mctighe, 2001). Rubrics are easy to understand and easy to explain which is why they have become so popular among teachers, parents, and students. Rubrics often help students make progress on their assignments or projects while

also helping students stay on the right track to finish a quality assignment or projects. Student learning can improve greatly through the use of rubrics because of how it makes instruction clear and how it keeps students on track to complete quality home work.

Rubrics can enhance student learning by having consistency in the way teachers score individual assignments as well as keeping consistency between the ways different teachers score the same assignments. Rubrics can also improve student learning by allowing students to peer-assess and self-assess assignments. Through scoring guidelines, students can learn the value of giving and getting feedback from themselves and others. Though rubrics may seem like a simple way to score assignments, rubrics allow for huge growth in the class room by providing transparency in grading, consistency, peer-assessment, and self-assessment.

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## Tips for Grading: A Teachers Guide

Mari Meuwissen

Abstract: When it comes to teaching, many questions are raised about grading and grading policies. This in part is due to every teacher having different ways of assessment, but it also has to do with what grades mean. Often students do not understand what a teacher is asking after receiving grading feedback, and in response, do badly on a test or assignment. Tips on how to go about grading are always helpful.

**Keywords**: tips for grading, student knowledge, and differentiated teaching

The word grading and/or grades, holds great meaning in the educational world. This is a major factor of stress for not only students but teachers as well. There are great responsibilities as a teacher, with grading being just one of them and certainly not an easy one as we will see. Guides known as the Golden Rules have been derived to help teachers with the grading process. These rules consist of: fairness, accuracy, consistency, measurability, and defensibility.

Schools use grades to measure academic achievement. Parents use grades to measure their child in relation to other children at the same academic stage. Grades are used to determine class rank, entry into higher level classes and even as an indicator as to their ability to attend certain academic institutions. With all of this riding on an assessment score, a teacher can feel some intense pressures. However, some suggestions and tips have been made with the intent of helping instructors to better their practices and make simpler the process of assigning a grade. The most prominent of these significantly important tips announcement of grade immediately, objective (not subjective) criteria, and differentiated instruction that can benefit the student. Lastly, grades can be a check point and resource for teachers. The use of these tips is to add helpful insight for instructors when in the grading process.

Rarely do students understand the full meaning of an assignment or test. When it comes to assignments, the best option for the teacher and the students is going over the grading policies before anything else. The reason: multiple assignments are handed in throughout the semester or year and by going over them in the very beginning it allows for the student to be somewhat ahead of the game. As author Myron Dueck explains (2014), students have a broad understanding of what is to be expected and can clarify any misconceptions or understandings with the teacher before the due date (pg. 26).

Another aspect of going over grading policies in the beginning of the year or semester is that it allows the teacher to create grading rubrics for all assignments accessible to students. If the student has a rubric they can see exactly what is expected of them for the completion of the assignment whereas if they did not have a guideline to double check that they are following the steps correctly, then a zero or low grade would be given. Research by Dueck explains (2014) how unprogressive it is to have a student do poorly merely due to them not understanding the assignment.

An incomplete is another option and is far less severe for the student for it can be reversed (pg.26). Another useful idea of a rubric is the notion that there can be ways students give feedback to the teacher. A useful tip from author Wolpert-Gawron (2011) is to design a special rubric specifically with the intent of the getting feedback on the assignment or the students understanding of the directions can be a useful tool (web). Again, this can directly tie into how the teacher assimilates grades and changes needing to be made, if any.

Not many people can say that every teacher they have ever had, throughout their school careers, has taught the exact same way. The reason for this is every person is different and in relation, teachers must tweak their teaching styles to adhere to the different learning methods. Author Wormeli (2006) infers when practices are changed

and differentiated they directly impact the grading policies (web). It might turn out you have two teachers who teach with relatively the same style, or you might have all teachers with differences in methods and grading.

This is key; differentiated instruction. According to Dueck, often times it is found that teachers are grading their students not on content knowledge and performance but rather what they turn in (pg.3). One would think the aspect of actually learning the materials to be far more important but in many instances it is not. This is why differentiated instruction can be useful to not only the student but teacher as well.

Let's put this into perspective when looking at testing; some students prefer multiple choice tests while others prefer written exams where they can explain what the reasoning is behind their answer. As a teacher what do you do? Researchers Ory and Ryan (1993) suggest measuring how well students perform in several different contexts contributes measurement accuracy (pg.113). specifically, with changing up how you give an exam you are offering multiple ways for the student to prove their knowledge while also adhering to exploring how well they do with different style testing. If they receive a bad grade on one exam and then a good grade on a different style, you as a teacher can start to infer what ways of testing are best suited for your students. This can later help you to grade accordingly based on what you saw with different testing styles.

A key part to this is to stagger the test dates between classes. If one class is farther along than the other, do not penalize the class for being at a different pace. Instead, allow for the extra time needed to finish the material and then test them on it. Changing the process in which the instructor does something can be used throughout the classroom. Another example of a differentiated teaching method is the use of the fudge factor. According to Ory and Ryan (1993), the fudge factor is when a student is borderline between two grades and then the teacher must look back on the performance of the student with previous assignments (pg.114).

The result of this is if the instructor bumps the student up to the higher of the two based on how

well they did with previous assignments, the effect will be the student will try harder. This is because they see they are rewarded for doing well on their assignments and will then want to improve on how they do the rest of the assignments.

Changing up a few policies within the classroom can prove to be beneficial for both student and teachers. Researchers Ory and Ryan (1993) conclude that grading becomes less stressful and more of a learning tool; to better explain this, look at absolute and relative grading, both grade a student based on their performance against other students and standards. It turns out the effect of this grading style is motivation from the student to do better (pg. 115). All it takes is willingness to change a few things inside the classroom to better help the students achieve the grade they deserve.

Finally, grades are not only used to see how well a student understands the material and how well they are doing in the class but more specifically, they can access the accuracy of the instructor. If there is a classroom with thirty students and twenty two of them get a C or less on assignment then there might misunderstanding of the topic. When this occurs, teachers can use this information as a means to change something up. Whether that is the material content, the due date of the assignment or, how much time is given to complete it, all can be factored in.

There are certain things as instructors that need to be taken into consideration; these include instructional design, goals, course institutional context (tips for improving...pg.109). The most important one being course design because sometimes the progress being made and the knowledge being absorbed does not always match up with the course objectives. reasons could be the cause for why the students do not understand the course objectives due to not responding well to the material presented to them. This could be caused by the speed at which the teacher is going at or the relevance of the subject to what the student is gaining from it. It is the belief of researchers Ory and Ryan (1993), when this happens it is the responsibility of the

instructor to review and formulate grades periodically to access how students are taking in and absorbing knowledge based on the material presented (pg. 112). Again, the idea is to gather how well students are doing and then formulate the next moves based on the grades.

If the majority of students are doing poorly then the instructor must make changes and correct certain aspects of the material. If, on the other hand the students are responding well to the course and are getting good grades, they know the speed and content is working well. Author and researcher Dueck (2014) believes the focus is less on the agenda of the class and more on the well being of the student and their learning (pg.8-10).

continuous Education is learning a environment for both student and teacher. Grading in so many ways allows for a better understanding on how to teach and go about incorporating content in ways for students to understand. Another tip and useful tool from Wolpert-Gawron (2011) to be used by educators is the feedback from students. This opens the door for them to be completely honest and discuss how they felt the class and teaching methods went (web). Poor grades indicate some factors relating not only to class work but quite possibly the material.

What this does is open opportunities for students to give their instructor insight as to what was hard for them and what they would like to change for the next time. Now, some students will not take this seriously but for those who do, it can be used as a really important learning tool. Not to mention the student feels better knowing they voiced their concerns if any. Teachers should be open to feedback from their students and take into account grades within the classroom when reviewing course content.

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