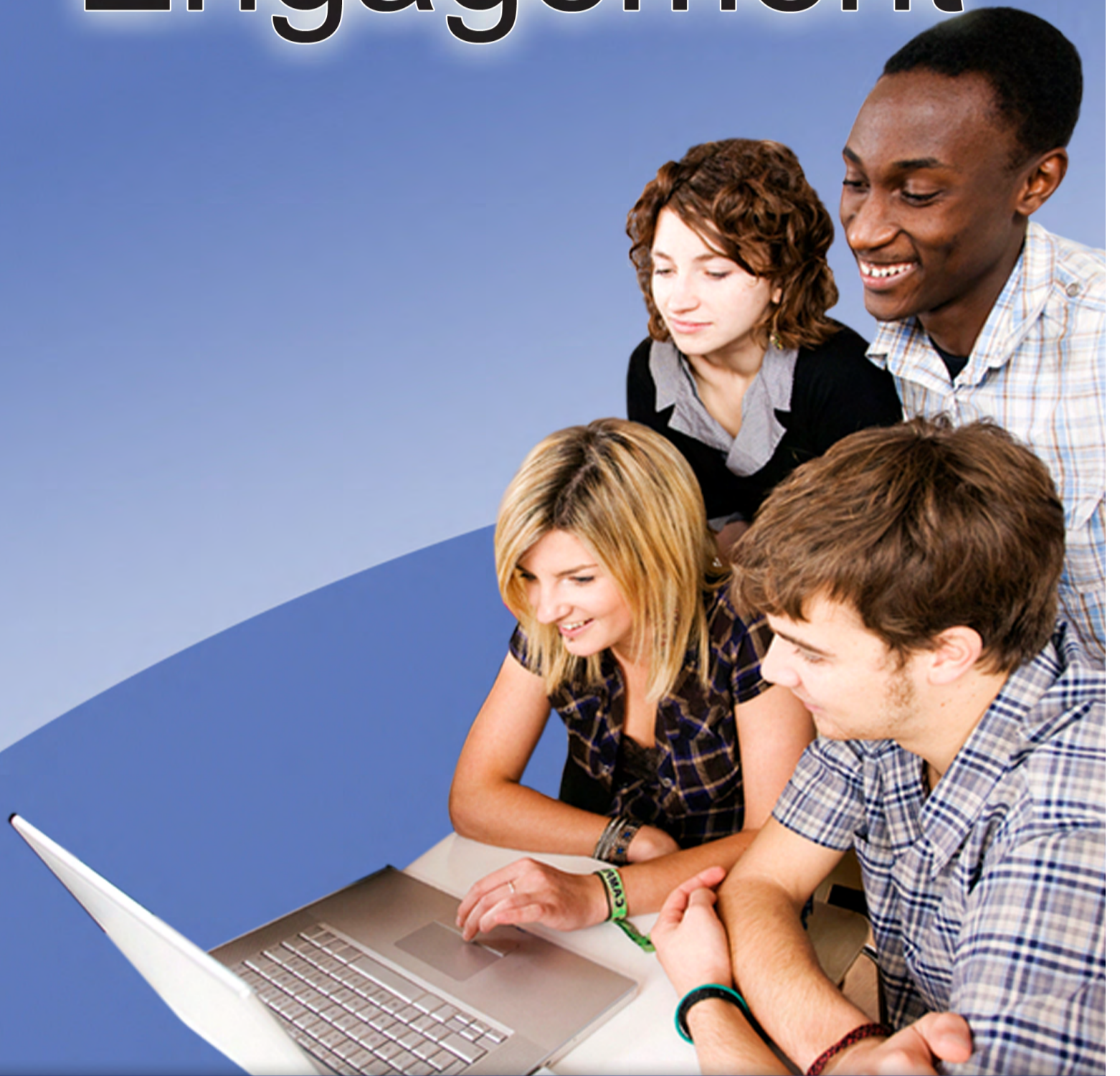


# Sparking Student Engagement



# Sparking Student Engagement

Effective teachers recognize the importance of students' feelings, interests, and aspirations. Then they consider strategies to enhance academic learning. Students are individuals with differing profiles of prior knowledge and varying levels of personal confidence in their own academic abilities. Students thrive and learn with confidence within a supportive classroom culture in which they feel valued by peers and teachers. Relationships matter in the learning process. Content that is presented to students in a manner that makes it relevant will enhance engagement and learning and encourage greater depth of study by empowering students to accept responsibility for their own learning.

Charlotte Danielson (2011) asserts that "student engagement in learning is the centerpiece of the Framework for Teaching." The well-meaning efforts and aspirations of the teacher will achieve little if students elect not to, or are unable to, engage intellectually with the tasks before them. Engaged students are intellectually active. Low level tasks, such as filling in missing words or learning by rote, are unlikely to lend themselves to engaged learning. Intense engagement is likely to result in more rigorous learning and deeper levels of thinking. A classroom of engaged students is recognizable by the range of meaningful activities such as discussions, discovering patterns, reflection, and making predictions.

Philip Schlechty and the Center for Leadership in School Reform (CLSR) hypothesizes that student engagement will improve when teachers present students with quality tasks. Secondly, student performance will improve as a direct result of greater engagement and hard work. This hypothesis is known as the "Working on the Work (WOW) framework." Schlechty identifies important contributory factors including content, product focus, choice, and authenticity, that teachers should consider when designing engaging activities for students (Bowen, 2003).

## Information Alignment

Materials presented in this eBook align with the following:

### Module Questions

- How can rigor and relevance impact student engagement and learning?
- How can piquing student interest, building relationships, and promoting meaningful learning spark student engagement?
- How can increased student involvement lead to deeper student understanding?

### Learning Outcomes

- Identify the importance of rigor and relevance within your content and as it transfers/applies to a practical and relevant setting.
- Explore instructional strategies that actively engage students in the learning process.
- Discover the impact student engagement has on student learning.

### Module Topic Focus

- Content Rigor and Relevance
  - Authentic Application of Content/Concepts
- Piquing Student Interest
  - Relationships Within the Class
  - How Students Learn
  - Project-based Learning
- Impact of Engagement on Learning
  - Behavior
  - Motivation
  - Individual and Group Achievements
  - Formal and Informal Assessment Results

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At time of publishing, all of the website information was accurate. Due to the nature of the internet, some of the website information may have changed or become unavailable. Please see the references section of the corresponding online module for the most up-to-date information.

## Content Rigor and Relevance

The International Center for Leadership in Education (2012) offers a tool for teachers to categorize curriculum and instruction (see Figure 1.). Quadrant D represents a competence to apply the highest levels of knowledge and skills creatively when confronted with unfamiliar situations. In order to promote learning for the most demanding skills represented in quadrants B and D, the teacher's role is most likely to be that of a classroom facilitator who supports the students' learning needs.

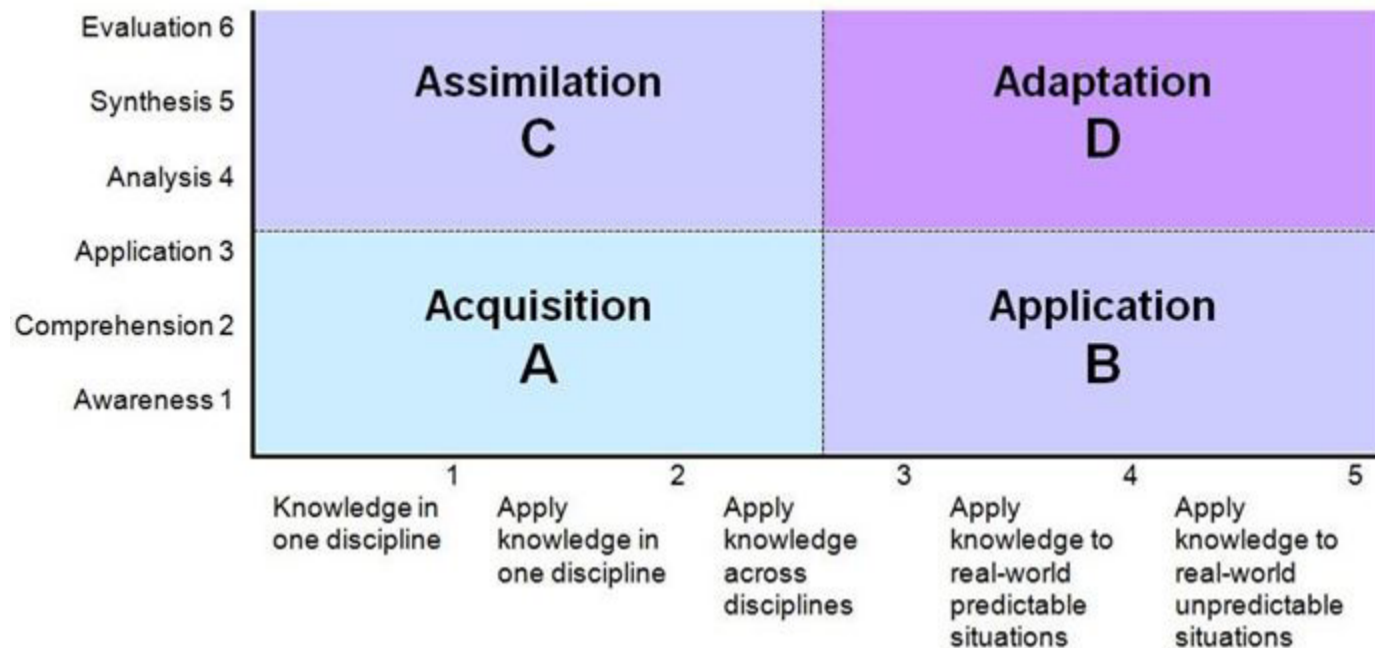


Figure 1. The Rigor/Relevance Framework

McNulty and Quaglia (2007) assert that schools need appropriate data in order to evaluate the rigor and relevance of instruction. Four categories of data are suggested for use when measuring the degree of success in implementing the assessed curriculum and the dispositional skills found in the unassessed curriculum.

- **“Core academic learning”** is a measurement of achievement in designated key subject areas.
- **“Stretch learning”** indicates the degree of participation and success in higher-level courses.
- **“Student engagement”** describes students' commitment, motivation, and positive relationships with stakeholders in the learning community.
- **“Personal skill development”** attempts to measure dispositions such as positive attitude and includes the development of leadership skills and involvement in service roles.

Teachers are further encouraged to use visual cues that teach and emphasize routines to students, enabling them to operate with a degree of independence (Scholastic, n.d.). Visual displays in the form of posters, noticeboards, or screen projections remind students what to do at the start of the day when arriving in the classroom, unpacking their bags, and planning their schedule for the session. Parents of younger children are involved in daily routines when they see notices indicating plans for upcoming field trips or the need for special equipment such as athletic shoes for later in the week.

Educators need to embrace the challenges of “rigor, relevance and relationships” in order to prepare students for life in the 21st Century.

### Authentic Application of Content/Concepts

Newmann, King, and Carmichael (2007) propose a set of standards for the development of authentic learning in schools. For students, an authentic learning experience should raise the level of academic rigor and increase the degree of interest. Teachers should expect to move from the superficial coverage of a breadth of material to a more in-depth teaching of a lesser amount of content. Newmann et al. turn to the experiences of adults who professionally work with knowledge in order to describe meaningful intellectual work. “Scientists, musicians, childcare workers, construction contractors, health care providers, business entrepreneurs, repair technicians, teachers, lobbyists, and citizen activists” are cited as examples of adult workers who use complex intellectual skills at an elevated level. Of course, students are not expected to perform

with the levels of expertise that professional working adults routinely exercise. However, professional adults can be used as models to identify examples of the intellectual performance that is required in order to improve upon the often “contrived and superficial” tasks that are presented to students in schools. Newmann et al. use the term “authentic” to describe the higher level intellectual and socially meaningful activities described. Lack of interest and lack of motivation are the cited reasons for a high proportion of dropouts from U.S. high schools. Newmann et al. propose a greater exposure of students to authentic intellectual experiences in order to generate the desired level of engagement in schoolwork. Students may be more likely to show interest—and willingly make an effort—when opportunities include the construction of knowledge, the deep exploration of content, expressions of opinions, and explanations of ideas about topics that have some significance outside of school.

Authentic learning according to Lombardi (2007) “typically focuses on real-world, complex problems and their solutions.” Activities with the potential for authentic learning include role-play, case studies, problem solving, virtual communities, and multi-disciplinary projects. Lombardi asserts that both students and educators value the effectiveness of learning by doing rather than learning by listening. A goal of authentic learning is to nurture transferable and complex skills that will help a person in the workplace and in other roles in life. Effective citizens need to distinguish between reliable and unreliable information, pursue lengthy arguments with patience, and identify patterns of information in a variety of contexts. The advent of Web-based tools offers a multitude of authentic opportunities to access data, simulate events, use remote or virtual instruments, and participate in online research and projects.

## Piquing Student Interest

Television presenters, car salespersons, street performers, and teachers share the need to create initial human interest and trust in order to successfully communicate their message to an audience. The highly competent, hard working, well-prepared teacher will not leverage optimum learning from students without first awakening their curiosity and interest. The effective teacher develops skills in order to capture the attention of the class and exhibits the intellectual confidence required in order to engage students with meaningful academic experiences.

### Relationships Within the Class

Effective teachers know that small efforts made to build positive personal connections with students, especially adolescents, reap great rewards in terms of student motivation and emotional harmony. Pianta, Hamre, and Allen (2012) maintain that classrooms are naturally social forums in which teachers and students enjoy interactions and share information about their lives outside of school. A positive classroom climate occurs when students enjoy school and is evidenced by students' "experience of warm caring relationships with adults and peers." Extreme negative classroom cultures may involve undesirable instances of "frequent yelling, humiliation, or irritation in interactions with teachers and peers." Teachers develop classrooms as safe learning environments when they display sensitivity to the needs of students in the form of "consistent, timely, and responsive interactions." Some teachers have successfully improved their relationships with students by participating with teaching partners in classroom observations that focus on the quality of teacher/student interactions. Pianta et al. place interactions and relationships with students as the "central problem in school reform," above other issues such as curriculum reform, assessment, and teacher/student ratios.

McNulty and Quaglia (2011) cite research to support the premise that relationships among students and staff are essential facets of improvements to learning. Qualities such as respect, responsibility, honesty, civility, and tolerance are seen as vital components of the positive relationships needed for an effective instructional climate. Students are inspired to achieve at higher levels when they perceive genuine encouragement and personal care from faculty members. Changes in curriculum and teaching strategies are insufficient in themselves to effectively raise the achievement levels of all students. According to Danielson (2011), "Teachers who operate at the proficient and distinguished levels in Domain 2 show genuine care for their students' needs and abilities both within and outside the classroom. Their students consider these teachers to be adults who believe in their learning potential, care about them personally, and are reliable sources of support for their learning" (161).

Enhancements to a positive school culture are also necessary. McNulty and Quaglia urge schools to focus on "three key components of the student experience: self-worth, active engagement, and purpose." Self-worth involves belonging to a school community and being appreciated as an individual. Active engagement requires a deep absorption in learning enabling students to see learning as important and enjoyable. A sense of purpose is related to leadership roles and personal accountability for choices made. The three components combined are instrumental in raising levels of academic achievement.

### How Students Learn

Marzano, Pickering, and Heflebower (2011) assert that engagement in learning happens when students answer in the affirmative to the four questions: "How do I feel? Am I interested? Is this important? Can I do this?" The how do I feel? factor refers partly to variables that are beyond the teacher's control, such as family circumstances, nutrition levels, sleep habits, and time of the school day. The teacher is, with appropriate instructional planning, able to harness factors that do reside within the classroom, such as the generation of enthusiasm, appropriate pacing, opportunities for physical movement, and efficient transitions between tasks. The Am I Interested? factor determines whether students will respond with the short-term attention that is needed to start their engagement. Innovative teachers plan activities that are more likely to create student interest. Marzano et al. recommend the use of games, the creation of non-threatening controversy, examples that contain unusual information, and questioning strategies that demand responses from all students. The Is this Important? requirement is fulfilled when students value a learning activity, and when they perceive connections to their lives, interests, and ambitions. Interest may be generated, for example, with illustrations from hobbies, sports, cultural connections, or local examples. At a higher level, students may link classroom experiences to deeply held family values and ambitions. Teachers who know their students are able to direct instruction with examples that are likely to generate the desired interest. Students also need to believe that a task is within their levels of confidence and capability. Marzano et al. emphasize the need for teachers to address and enhance students' sense of self-efficacy in order to satisfy the Can I do this? factor. The effective teacher tracks and analyzes individual student progress, provides regular verbal feedback, and overtly teaches self-efficacy.

Keller (2013) asserts that motivational design aims to stimulate students with an engaging level of challenge, incorporates

learners' goals and interests, and increases opportunities for a feeling of satisfaction when accomplishments are established. The attention, relevance, confidence, satisfaction (ARCS) model is, according to Keller, "a problem solving approach to designing the motivational aspects of learning environments to stimulate and sustain students' motivation to learn." ARCS is founded upon research on the components of human motivation. Teachers sometimes limit themselves to familiar instructional tactics that reside in their classroom comfort zone. A reluctance to seek out new ideas could significantly limit enhancements to learning. A balanced approach to motivational design should encompass both the motivational needs of students and the requirements of curriculum and instructional outcomes. Student motivation in the classroom may be influenced by a number of factors such as choice of materials and examples, teacher behaviors, the structural phases and pace of a lesson, and the course structure of units and lessons. The ARCS model specifies strategies to gain student attention, create relevant learning experiences, boost confidence and gain satisfaction through intrinsic and extrinsic rewards.

**Project-based learning.** Project-based learning aims to capture student interest with authentic problem-solving scenarios that require the application of knowledge and social skills similar to those needed in the workplace. David (2008) reviewed the limited research available on the efficacy of project-based learning. Projects range in complexity from those that shape the entire school curriculum to multidisciplinary modules in elementary schools and specialist subject-based projects for secondary students. The degree of student collaboration can vary between whole class initiatives, small groups, or an individual approach. David cautions that although research cites examples of successfully implemented project-based learning in schools, the successful implementation of project-based learning remains a challenging proposition for teachers. Projects are more likely to succeed when teachers are able to access models of well-developed projects, and benefit from a culture that includes strong support and collaboration between both teachers and students. Some of the attractive features of project-based learning—such as motivating students with real-life problems and the opportunity to collaborate in finding solutions— may be applied in any classroom without the need to embark upon a complete and lengthy project.

The Buck Institute for Education (n.d.) details some of the requirements of project-based learning (PBL) together with the perceived benefits for students. A typical project requires the student to initiate a process of inquiry in response to a problem or challenge. The research question may be provided by the teacher or alternatively students may exercise a degree of choice in a project of their choosing. In either case, the teacher is involved in the management and assessment of the project in order to ensure that learning takes place in line with academically sound instructional outcomes. The duration of projects may be as short as a few days or could extend for a complete semester. PBL may be utilized in a variety of environments, including elementary classrooms, secondary subject-specialized courses, and vocational classes. PBL offers advantages in terms of content and process. Projects offer rich opportunities for students to gain deeper understanding of focused sections of content. The process of the project involves valuable skills and dispositions such as communication, collaboration, and responsibility to a team. A final product that is meaningful as a solution to a real problem or challenge adds authenticity to the learning experience.

# Impact of Engagement on Learning

The Center for Comprehensive School Reform and Improvement (2010) offers insight into how teachers can nurture student engagement and enable improved academic performance. Engagement with a task is evidenced when students commit time and effort, and care about the quality of work produced. Successful teachers are able to develop relationships, classroom culture, and appropriate tasks that increase the level of student engagement. According to Danielson (2011), in an effective culture for learning, “the teacher conveys enthusiasm for the subject, letting students know they are pursuing this knowledge because it’s important, interesting, and fun—as opposed to learning something because it will be on the state test or is in the textbook” (175).

Students respond positively when they feel safe, comfortable, and are able to ask questions without fear of setbacks. Additionally, students respond positively when they feel that the teacher cares about their individual progress. The effective teacher is able to demonstrate care by knowing the student’s strengths, interests, and weaknesses, and accordingly presenting learning experiences that are developmentally attainable and challenging. Academic tasks are valued more highly when they have discernable links with life outside of school so that students may relate to issues being studied. Academic performance and engagement are prefaced with the need for a safe environment. Students feel safe and valued when they perceive that discipline is enforced fairly and consistently.

## Behavior

Student participation in the classroom and involvement in school wide activities are examples of behavioral engagement. Participation includes interactive behaviors such as asking precise questions, seeking help, and contributing to discussions that are likely to result in improved learning. According to Davies, Summers, and Miller (2012), behavioral engagement includes dispositions such as “effort, persistence, participation, and compliance with school structures.” These aspects of student behavior are commonly reported anecdotally as part of an assessment and reporting system. A hard-working student who is excessively challenged with classroom learning may be deeply engaged behaviorally but only superficially engaged cognitively. Care is needed to ensure that the needs of such students do not escape the attention of the teacher because they appear to be learning. A worst-case scenario is that a summative assessment identifies serious learning gaps after a prolonged period of complacency. The effective teacher recognizes that a process of formative feedback is required in order to ensure that student engagement is indeed leading to gains in learning.

## Motivation

Student engagement in learning may be attributed to intrinsic and extrinsic factors. Intrinsic motivation arises from a genuine interest in learning, a quest for new knowledge and skills, or a special interest in a topic of study. Extrinsic motivation may be generated by a desire for good grades, transcripts and college entrance requirements, an eagerness to please teacher(s) or family, or a fear of failure and family disapproval.

Wright (2012) considers reasons why students may be more or less motivated. The reflective teacher seeks explanations and solutions when faced with student motivational issues. A student may find an assigned task too difficult due to a lack of required skills. The teacher may need to identify and address some required academic skills and cognitive processes before the student is able to move to the next level. In some cases, the student becomes unmotivated because the task requires more effort than the student is willing to put forth. The teacher may need to encourage the student and consider strategies such as chunking the work into manageable portions.

The conflicting demands of concentrating on the task and succumbing to distracting stimuli may provide a tussle familiar to both young and adult learners. Distractions will always be present. The teacher may be able to reduce obvious distractions, such as uncomfortable ambient temperatures, extraneous noise, or the temptation of playing with smart phones. The potency of extraneous stimuli is reduced when the learning activities are presented in such a way as to hold the students’ attention. Students don’t always see an adequate reward for the successful completion of a demanding academic task. In this case, the teacher may be unable to convince the student that the learning has a long term benefit. Short term praise and encouragement may be the best means to keep the student on task. Wright asserts that students with either a general lack of self-confidence, or low self-efficacy in an area of content, will convince themselves that a task is beyond them. The skillful teacher is able to distinguish between genuine lack of skills and situations in which students may avoid the risk of failure. Most students have favorite teachers for whom they will make an extra effort because they value the positive nature of the teacher-student relationship. The effective teacher is aware that students are social by nature and generally respond to positive reinforcement and personal interest. Praise, although most effectively phrased in terms of comments about academic achievement and progress made, is received with greater value and effect when given within a caring professional relationship.

## Individual and Group Achievements

Kutnick, Blatchford, and Galton (2005) observe a “wide gap between the potential of group work and its limited use in schools.” Research in the U.K. notes that students commonly sit in groups but lack the benefit of strategies and interactions necessary for effective group learning. The worst case scenario is zero learning within a group culture of distraction and social talk. Kutnik et al. propose the need for teacher training in strategies for setting up and managing effective group work. Additionally, students need coaching in what productive group work behaviors are. Students need to learn how to listen, explain, and share their own ideas in a culture of trust and respect. Successful group work is associated with the enhancement of personal relationships between/among peers and between students and the teacher. A claimed bonus of effective group work is a general improvement in school climate by removing rather than controlling, some aspects of poor discipline. Teachers operating with successful applications of group work report enhanced abilities of students to operate independently, a lessening of low level procedural duties, and an increase in time available to reflect on their instructional success.

**Formal and informal assessment results.** Formal assessment generally takes the form of a test, quiz, or essay at the end of a phase of study. The results are often described with the aid of a numerical grade or percentage mark. Such formal assessments are labelled as summative because they elicit performance data after the study has been completed. As a generalization, the timing of feedback obtained from a formal assessment is too late to influence improvements in future performance. Informal assessments can include tests, quizzes, and essays. The difference lies in how the results are communicated and used by the teacher and student. Additionally, informal assessments may include observations, checklists, rating scales and rubrics, portfolios, participation, peer and self-evaluation, and discussions about skills and metacognition. Informal assessment, referred to as formative assessment, is used to measure the success of and to redirect the learning process. Popham (2008) defines formative assessment as “a planned process in which assessment-elicited evidence of students’ status is used by teachers to adjust their ongoing instructional procedures or by students to adjust their current learning tactics.”

J. Chappuis, Stiggins, Chappuis, and Arter (2011) assert that used with skill, assessment can “motivate the reluctant, revive the discouraged, and thereby increase, not simply measure, achievement.” The assessment-literate teacher develops the pedagogical knowledge and skills needed in order to accurately collect student achievement data that may be used to redirect instruction and improve student achievement. When students are taught how to engage in effective self-assessments they are empowered to improve their own academic performance. Chappuis et al. propose a number of quality assurance features for reliable assessment instruments. Assessments should serve the specific information needs of and communicate results to users. Users can include the students, teachers, and administrators. Clear instructional outcomes are the basis for designing any assessment tool. An effective assessment tool provides an accurate measure of student achievement. A fundamental motivational facet of assessment is to appraise students of their progress toward instructional outcomes and to help them retain confidence and motivation. Chappuis et al. emphasize the important involvement of students themselves in self-assessment, goal setting, tracking and reflecting upon their own progress, and sharing successes and concerns with peers and teachers. In reality, students weigh the effort required and the gains predicted when they decide whether or not to engage in a phase of learning.

## Conclusion

Students deserve both a careful choice of appropriate curriculum and an appealing presentation that catches their interest. The effective teacher brings interest and appropriate learning experiences to the classroom. The skills of a Broadway stage star are not necessary in order to become an outstanding teacher. While basic presentation and communication skills are needed and can be learned, interest at the beginning of a lesson is also created by the selection of appropriate and interesting materials and examples. The classroom culture is itself sufficient to motivate students if they feel secure and confident to take risks and exercise their creativity. Caring relationships between the teacher and students will create a sense of trust that extends to a belief in the value of classroom tasks. When students are interested, engaged, and working well with peers, they are likely to operate at a greater depth of learning and make progress that is permanent in developing skills for the future.

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