



# AUTHENTIC ASSESSMENT

EMPOWERING STUDENTS  
TO PROVIDE EVIDENCE  
OF REAL LEARNING

**smartlab**

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# TABLE OF CONTENTS

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|                                      |   |
|--------------------------------------|---|
| Abstract                             | 3 |
| What We'll Cover in This White Paper | 3 |
| Purposes of Assessment               | 4 |
| Summative Assessment                 | 4 |
| Formative Assessment                 | 4 |
| Assessment for Learning              | 5 |
| Assessment as Learning               | 5 |
| Authentic Learning and Assessment    | 6 |
| Project Journals and ePortfolios     | 6 |
| Self-Assessment                      | 7 |
| Conclusion                           | 8 |
| References                           | 9 |



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# ABSTRACT

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Assessment is a word that can cause feelings of distress and anxiety in students and teachers alike.

The word has become almost synonymous with high-stakes standardized testing, resulting in increased stress at the mention of any way to measure what a student has learned. Despite its negative associations, assessment plays several important roles in measuring learning.

It is important to note, however, that for assessments to be truly valuable, they must align with qualities worth measuring and the results must be used for their intended purposes. Thus, designing authentic measures of learning becomes an essential part of any effective teaching practice.

This paper will explore how effective assessment practices impact teaching and learning as well as how developing authentic assessments can provide more meaningful educational experiences that result in lasting learning.

The role of student portfolios in documenting and measuring authentic learning outcomes will also be presented.

## WHAT WE'LL COVER IN THIS WHITE PAPER

- What role does assessment play in learning?
- What does authentic learning and assessment look like?
- How can students provide meaningful evidence of their learning?

RELATIONSHIPS  
are the cornerstone of all  
TEACHING AND LEARNING

# PURPOSES OF ASSESSMENT

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Assessment can serve a range of purposes in education. Those purposes often relate to measuring student learning and measuring the results of teaching, including evaluating the overall effectiveness of lessons, units, courses, and schools.

The purpose of assessments most relevant to this paper is that of measuring how well a student is improving both knowledge and skills as a result of learning experiences.

Two main types of evaluation prove useful in measuring that learning: summative assessment and formative assessment.

## SUMMATIVE ASSESSMENT

Traditional assessments have typically all been summative, intended to measure what information has been retained or what skills have been developed by the end of a learning activity. Unit tests, term papers, and end of project quizzes are all examples of summative assessments.

While these tools can provide useful information about what a student has learned about a topic, summative assessments provide little insight into learning as it happens, limiting their effectiveness in improving teaching and learning.

## FORMATIVE ASSESSMENT

Since the early 1980s, assessments have seen greater use as tools for monitoring the learning process to guide adjustments to teaching. Assessments used in this way are often referred to as formative assessments.

The Eberly Center at Carnegie Mellon University describes formative assessments as low-stakes ways of helping “students identify their strengths and weaknesses and target areas that need work,” and how teachers can “recognize where students are struggling and address problems immediately.”<sup>1</sup>

The key to using formative assessments effectively is the need to provide a meaningful system of giving and receiving feedback about the intended learning.

In contrast to summative assessments, which typically occur at the end of an instructional unit, formative assessments are most effective when administered frequently and regularly as part of the learning process.

When used this way, assessments of learning can become assessments for learning and even assessments as learning.

## Assessment for Learning

Assessment for learning is “a process of both learners and teacher being engaged in seeking and interpreting evidence to figure out where the learners are in their learning in relation to what has been taught, where they need to go next in their learning, and how to get there.”<sup>2</sup>

The resulting process of collaborative evaluation places learner and teacher on the same team, in which they work together to improve and deepen understanding and skill development.

Rick Stiggins, founder of the Assessment Training Institute, explains the importance of assessment for learning in guiding students and teachers “to continuously monitor their current level of attainment in relation to agreed-upon expectations so they can set goals for what to learn next.”<sup>3</sup>

He emphasizes the role that students play in providing and communicating evidence of learning throughout the entire learning journey, while benefiting from ongoing feedback from teachers, peers, and family members.

When students are involved as “data-based instructional decision makers” alongside their teachers, formative assessment is transformed into real assessment for learning.

## Assessment as Learning

Assessments can also serve as a form of retrieval practice, a way to describe the intentional act of recalling information from memory.

Brown, Roediger, and McDaniel describe the benefits of retrieval practice and assessment in the book *Make It Stick*.

With respect to this use of assessment, they emphasize that “recalling what you have learned causes your brain to reconsolidate the memory, which strengthens its connections to what you already know and makes it easier for you to recall in the future.”<sup>4</sup>

In this way, assessments can be used as learning experiences—ways of strengthening both content knowledge and skill development.

Assessment as learning can also be a collaborative experience, in which students are encouraged to work with each other to reflect on their learning and adjust what they understand and how they are learning.

Though similar to assessment for learning, assessment as learning places an increased emphasis on the metacognitive processes that students experience as part of a learning experience.<sup>5</sup>

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# AUTHENTIC LEARNING AND ASSESSMENT

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Authentic assessment incorporates many of the ideas mentioned up to this point and emphasizes the fact that effective assessment cannot be a separate activity from the learning process.

While it is true that tests, quizzes, and other summative tasks can capture a snapshot of one's knowledge and skills at a particular time, more meaningful evaluations of learning result from interweaving giving and receiving detailed feedback from teachers and peers throughout learning activities.

In addition, assessments that are truly authentic reflect applications of knowledge and skills in realistic situations. When possible, those situations should enable students to think and create as professionals on work that is relevant and interesting.<sup>6</sup>

In SmartLab environments designed and supported by Creative Learning Systems, this type of authentic learning and assessment happens every day.

Students are presented with realistic learning challenges and high-quality, curated learning materials and given the opportunity to develop success criteria for their projects alongside trained SmartLab Facilitators.

Students identify specific learning objectives for themselves, while planning ways of taking their learning outside the classroom to impact their communities in meaningful ways. Throughout their projects, students are guided by feedback from their facilitator and peers to improve and discover new applications of knowledge and skills that they haven't discovered on their own.

## PROJECT JOURNALS AND EPORTFOLIOS

Skilled facilitators recognize that the learning process is what matters most in assessing their students' work, so they provide regular, ongoing opportunities for their students to demonstrate that process in addition to sharing the end product with others.

One of the key ways that students provide evidence of their learning is through keeping detailed records of their experiences in a SmartLab using project journals and ePortfolios which are easily shared with their facilitator.

The project journals that students maintain represent what Danielson and Abrutyn describe as "Working Portfolios." They serve as records of the students' work-in-progress and give facilitators the opportunity to give feedback to guide students in improving their projects or refining their learning processes.

Students often make use of their project journals as they prepare presentations or other means of sharing their work in display, showcase, or best works portfolios.

About the transformation of project journals into showcase portfolios, Danielson and Abrutyn describe how "students must reflect seriously on their work and what it demonstrates about them as learners."<sup>7</sup>

In this way, students deepen their understanding of their projects even further as they reflect on their learning experiences.

Matt Renwick provides a compelling argument for

using portfolios as a key component of authentic assessment in his book, *Digital Portfolios in the Classroom*. He describes the nature of the partnership between student and teacher in developing portfolios as meaningful evidence of the learning process and the progress of students over time.

## AUTHENTIC LEARNING & ASSESSMENT happens everyday in a SMARTLAB HQ

The task of maintaining records of this growth is shared by students and facilitators as they contribute to journals throughout each project cycle in a SmartLab.

Renwick also provides a clear framework for effective assessment of portfolios to support student learning. At the heart of assessing student learning using portfolios lies the fact that “relationships are the cornerstone of all teaching and learning.”<sup>8</sup>

With a solid relationship in place, SmartLab Facilitators help their students assess their own learning by supporting their thinking processes as they explain their own progress and record their projects.

As students in a SmartLab plan their own learning experiences, they also develop their own SMART objectives for each project they embark on. These specific, measurable, attainable, relevant, and time-based descriptors of what a successful project will be like serve as the same criteria for assessing student learning in a SmartLab.

By working closely with their facilitator to monitor their own progress toward SMART objectives, students become masters of their own learning.

## SELF-ASSESSMENT

In fostering authentic learning experiences in a SmartLab, skilled facilitators not only support their students in planning and documenting their own learning experiences, they also empower their students to assess their own learning.

By providing clearly defined assessment criteria (that students have contributed to in significant ways), facilitators pave the way for students to identify the strengths in their work and the areas in which they can improve.

An important part of the SmartLab Learning process is the self-assessment that students complete for each project.

They are encouraged to explain and justify the extent to which they have met each part of their SMART objectives, backing up their assessment with evidence recorded in their project journals.

These self-assessments provide an excellent opportunity for students and facilitators to reflect on the growth that each student has experienced as part of his or her project.

Throughout the entire SmartLab Learning process, students work toward what Mark Wilbert describes as “the gold standard for authentic assessment”—when students “develop their own plans for holding themselves accountable and measuring the success of their endeavors.”<sup>9</sup>

# CONCLUSION

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Developing authentic and meaningful ways of assessing student learning has always been a challenge for educators.

When students are not involved in that development process, they become mere data points in a collection of information rather than active participants in measuring learning and growth.

However, as students participate from the beginning—defining learning outcomes alongside their teachers—they can truly own their learning experiences and collect evidence to support their work toward meaningful objectives.

That collected evidence, organized in project journals and shared as portfolios with others, forms a solid foundation for students and teachers to assess learning in authentic ways.

## ABOUT CREATIVE LEARNING SYSTEMS

Creative Learning Systems has pioneered the conversion of traditional learning environments to project-based learning experiences since 1987. Today, Creative Learning Systems partners with the most innovative school leaders nationwide to provide personalized, project-based learning experiences and environments that increase a student's capacity through engaged, active, and social problem solving.

With SmartLabs' suite of solutions, we have provided students with hands-on, project-based learning experiences that ignite their passion for science, technology, engineering, and math; helped them build lifelong communication, collaboration, and critical-thinking skills; and empowered them to approach challenges with creativity.



# CONCLUSION

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