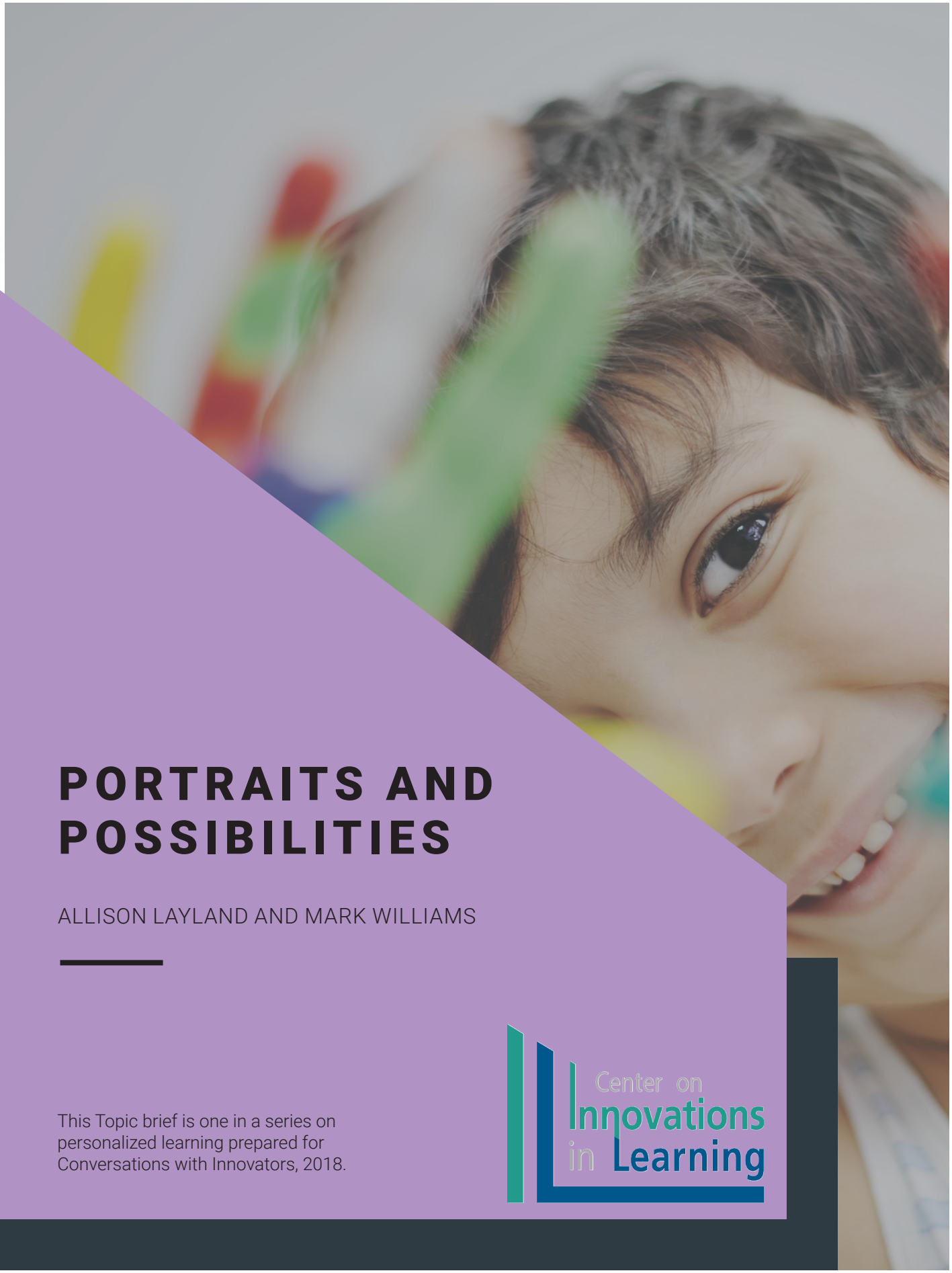


PORTRAITS AND POSSIBILITIES

ALLISON LAYLAND AND MARK WILLIAMS

This Topic brief is one in a series on personalized learning prepared for Conversations with Innovators, 2018.

Center on Innovations in Learning

Over the past few years, much attention has been given to personalizing learning to improve student outcomes. “Personalized learning varies the time, place, and pace of learning for each student, enlists the student in the creation of learning pathways, and utilizes technology to manage and document the learning process and access rich sources of information” (Twyman & Redding, 2015, p. 3). Learning is personalized through relationships (teacher and student, teacher, student and family, student to student), engagement (students creating and navigating their own learning pathways), and building student’s personal competences (cognitive, metacognitive, motivational, and social-emotional competencies) (Redding, 2016). Personal competencies facilitate one’s learning and are necessary for successful goal attainment:

- Cognitive competency is the interaction and assimilation of new information in prior learning and knowledge and promotes critical thinking, creativity and deeper understanding of concepts;
- Metacognitive competency consists of self-appraisal and self-regulation, the ability to set and pursue goals by applying learning strategies;
- Motivational competency is the engagement and persistence in pursuit of learning goals; and
- Social/emotional competency is the sense of self-worth and regard for others which leads to learning and working collaboratively with others and making responsible decisions (Redding, 2014, Bullock, n.d,).

It seems logical that students would be more successful in learning if we tailor instruction, including the environment, pace, and presentation of concepts, to each student’s needs, interests, and aspirations. However, personalizing learning is a complex process that begins with the student–teacher relationship, uses various methods and technologies to personalize the student learning experience, and involves alternative means for students to demonstrate mastery of knowledge and skills. Many have turned to student portfolios as an alternative to formal assessments to document student learning.

Student portfolios are not new; however, to truly personalize learning, we need to push beyond portfolios to facilitate students developing a learning portrait of their personal competencies and learning journey. In this brief, we summarize the research related to learning and student portfolios, current practices, suggest possibilities in using use of student portraits as an opportunity to engage students in owning, reflecting on, and sharing their application of learned personal competencies to further their own learning and realize their aspirations.

SUPPORTING RESEARCH

Our parents' learning was through a traditional one-size-fits-all approach focused on teachers presenting specific content and students memorizing content-related facts and formulas. Student learning was measured through paper and pencil tests that required students to regurgitate the facts and figures. Student learning, often, led to obtaining traditional industrial jobs.

Our children's learning was defined by standards that describe what students should know and be able to do at each specific grade level. The focus of learning shifted from memorization to understanding and applying constructs through content. Academic preparation led to careers defined by the many technological breakthroughs of the 20th and early 21st centuries. Students demonstrated academic learning through standardized tests aligned to the standards; however, some learning was more difficult to measure and warranted an alternative means of documenting student learning, the student portfolio.

Student portfolios emerged as a tool when new instructional approaches were being used to emphasis the student's role in building understanding beyond memorizing facts. The early work of student portfolios occurred at the university level in an effort to better assess student writing skills (Belanoff & Elbow, 1986; Yancey, 1992; Hamp-Lyons & Condon, 2000). The Office of Educational Research and Improvement (OERI) of the U.S. Department of Education defined portfolios as "collections of student work representing a selection of performance" and noted that they can be "a record of the activities undertaken over time in the development of written product" (1993).

The use of student portfolios expanded beyond writing, from individual use to school wide use, to not only assess performance, but to engage students in the learning process (Mitchell, 1992; as cited in Lund & Kirk, 2010). Portfolios are also being used to inform educational practices (Hall, 1992; Borko, Micchalec, Timmons, & Siddle, 1997; Darling, 2001). Several states have portfolios as part of their assessment program for nontested grades and subjects. Using rubrics to define levels of performance and collecting evidence to assess a student's level of performance and reflection on learning has become standard practice across the nation.

Although portfolios have become a widely used practice, concerns have been noted, including the time it takes to manage the process and the lack of interrater reliability in the scoring (Merina, 1996; Stellwagen, 1996). Stellwagen notes that "although it is believed that the rubric and performance assessment movement is making a very positive contribution to our educational profession, it would be naïve to believe that this method is a panacea for all our schools' assessment problems" (1996, p. 5).

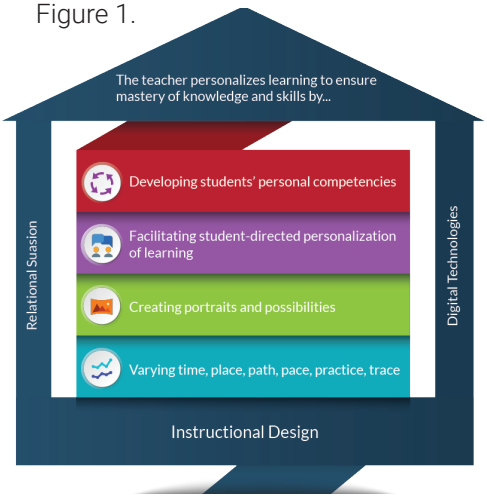
The learning of today's children and our future children requires an emphasis on the foundational critical competencies that facilitate learning and lead to application of learning successful pursuit of goals matched to interests and aspirations, in addition to the achieving the established rigorous standards. Research has long supported the concept that learning is more than the acquisition of knowledge and successful students are those that have developed critical competencies in addition to academic skills (Redding, 2014, Bullock, n.d.). Ausubel and Robinson (1969) noted that the most important factor influencing meaningful learning was the quality, clarity and organization of prior knowledge. To understand a concept more deeply, it is necessary to consider new experiences in the context of past understanding (Kolb, 1984; Schön, 1991; Boud, Cohen & Walker 1993). The action of setting goals is another important element of learning which encourages individuals to behave decisively in pursuit of their goals. Bullock notes that "students must [also] acquire the confidence, skills and values to make rational and well-informed decisions about the paths they select." Finally, student self-reflection or self-evaluation is also a critical skill for learning and success (Martin et al 2002; Twenge & Cambell, 2001).

CURRENT PRACTICES

Cognitive researchers and innovative educators have recognized that an important part of student success are personal competences—the cognitive, metacognitive, motivational, and social-emotional skills and behaviors that successful students demonstrate in learning and life. Figure 1 shows the critical components of designing instruction to personalize learning for student mastery of knowledge and skills.

Teaching and assessing personal competencies is a difficult task; however, technology combined with testing and educational theory, is providing promising solutions. Building on John McConnell's AMSOFT computer software, Stellwagen has created a diagnostic tool whereby students can self-assess and diagnose their own performance. Instructional style, question format, thinking style, and attention duration are analyzed, resulting in a learner profile. Students use the profile to identify strategies that could increase their assessment performance. In this example, students took ownership of their profiles and were challenged to learn strategies, thus guiding their own learning.

Figure 1.



Teaching and assessing personal competencies is a difficult task; however, technology combined with testing and educational theory, is providing promising solutions. Building on John McConnell's AMSOFT computer software, Stellwagen has created a diagnostic tool whereby students can self-assess and diagnose their own performance. Instructional style, question format, thinking style, and attention duration are analyzed, resulting in a learner profile. Students use the profile to identify strategies that could increase their assessment performance. In this example, students took ownership of their profiles and were challenged to learn strategies, thus guiding their own learning.

The Career and Technical Integrated-Basic Education and Skill Training Program (I-BEST) implemented throughout the state of Washington integrates career pathways with contextualized education, providing students with industry-recognized credentialing and basic education for advanced training. Contextualized education is integrated instruction with an emphasis on vocational training. The I-BEST program includes evaluation and assessment mechanisms to identify academic competencies, behavioral traits and overall interest, and monitor performance so supports can be provided. Students are highly engaged in designing their pathway to achieve sustainable employment outcomes (Couch, Ross, & Vavrek, 2018).

The International Baccalaureate Program(IB) uses a Learner Profile which describes a broad range of learner capacities and responsibilities that go beyond academics to successfully prepare students for 21st century careers. The profile focuses on developing learners who are inquirers, knowledgeable, thinkers, communicators, principled, open-minded, caring, risk-takers, balanced, and reflective. These can be clustered into four broad themes (Bullock, n.d.):

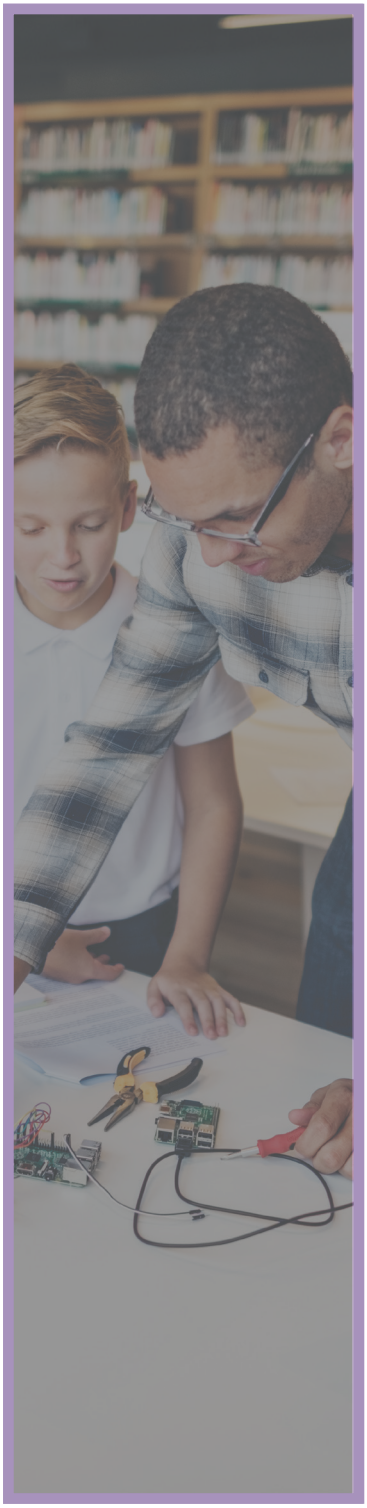
- The cognitive processes of acquiring in-depth knowledge and understanding (knowledgeable, thinkers, reflective)
- The conative or personal capacities of personal intention and self-efficacy (inquirers and principled)
- Personal qualities and emotional skills related to wellbeing and self-belief (caring, risk-takers, balanced)
- Contribution to the community, collaboration and culture (communicators and open-mindedness)

Students use the Learner Profile to guide and document their successes and their challenges in developing capacities across the four themes.

Students use the Learner Profile to guide and document their successes and their challenges in developing capacities across the four themes.

POSSIBILITIES FOR PERSONALIZED LEARNING

If diagnostic assessment tools such as the ones discussed earlier were used to design career pathways based on students' preferences, interests and needs, engaged students in monitoring their progress by collecting evidence of both struggles and successes, and facilitated students' use of this information to make adjustments throughout the student's education journey, learning experiences would be more personalized and lead to successful pursuit of further study and employment. Furthermore, if student Portraits, based on the concepts of assessment portfolio and learning profile, beginning in kindergarten through high school and even postsecondary study, students, families and teachers would have documentation of the learning journey to further shape opportunities and pathways to success. What would this look like? Teachers would plan for and facilitate student learning based on their needs and interests through meaningful, relevant, open-ended instructional activities. Students would use technology-based performance assessments to create authentic products that demonstrate their learning. Work collected would not focus on the best, but on telling the learning journey, the struggles and challenges, strategies used to address the challenges, and reflective lessons learned as well as successes. Students would build a continuous Portrait documenting learning of personal competencies in addition to academic skills, like the themes in the IB Learner Profile, but more individualized. The Portrait information in turn would be used to determine a career pathway matched to student desired possibilities. Teachers and students work to integrate academic learning with the development of personal competencies, capturing salient moments using digital diaries. Entries are used to further inform learning and make adjustment to the student's pathway. Each teacher would then use the body of collected information to hone instruction and supports to further student progress. The Portrait also documents the twists and turns that occur along the varies pathways students explore as their interests and aspirations evolve over the educational journey. By the time the student graduates, a complete map of learning is available to assist the student, instructors or future employers on postsecondary experiences that capitalize on the student's competencies and life goals. This possibility is not far away. Advances in technologies, alternate ways of measuring performance, and advances in planning for and teaching personal competencies are developing that will lead to more meaningful, relevant, and challenging learning experiences that enhance student engagement in owning and designing their pathway for learning success and life success.



REFERENCES

Ausubel, D and Robinson, F. 1969. *School Learning: An Introduction to Educational Psychology*. London, UK. Holt, Rinehart and Winston.

Belanoff, P., & Elbow, P. (1986). Using portfolios to increase collaboration and community in a writing program. *Writing Program Administrator,* 9(3), 27–40. Retrieved from http://wpacouncil.org/archives/09n3/09n3belanoff.pdf

Borko, H., Micchalec, P., Timmons, M., & Siddle, J. (1997). Student teaching portfolios: A tool for promoting reflective practice. *Journal of Teaching Education*, 48(5), 347–357.

Boud, D., Cohen, R., & Walker, D. (eds) (1993). *Using Experience for Learning*. Buckingham, UK. Society for Research into Higher Education and Open University, 1-17.

Bullock, K. (n.d.). International Baccalaureate learner profile: Literature review. Retrieved from https://www.ibo.org/globalassets/publications/ib-research/iblearnerprofileeng.pdf

Couch, K. A., Ross, M. B., & Vavrek, J. (2018). Career pathways and integrated instruction: A national program review of I-BEST Implementations. *Journal of Labor Research, 39*, 99–125.

Darling, L. F. (2001). Portfolio as practice: the narratives of emerging teachers. *Teaching and Teacher-Education, 17*, 107–121.

Hall, D. (1992) Professional development portfolios for teachers and lecturers. *Journal of In-Service Education, 18*(2), 81–86.

Hamp-Lyons, L., & Condon, W. (2000). *Assessing the portfolio: Principles for practice, theory and research*. Cresskill, NJ: Hampton Press.

International Baccalaureate Organization (2013). IB learner profile. Retrieved from https://www.ibo.org/contentassets/fd82f70643ef4086b7d3f292cc214962/learner-profile-en.pdf

Kolb, D. 1984. *Experiential Learning: Experience as the Source of Learning and Development.* Englewood Cliffs, USA. Prentice-Hall.

Lund, J.L. & Kirk, M. F. (2010). *Performance-based assessment for middle and high school physical education*. (2nd ed.) Champlain, IL: Human Kinetics.

Mercer, N. 2002. "Developing dialogues". In G Wells, and G Claxton, (eds). *Learning for Life in the 21st Century*. Oxford, UK. Blackwell.

Merina, A. (1996). The latest on student portfolios. *NEA Today, 15*, 17.

Mitchell, R. (1992). *Testing for learning: How new approaches to evaluation can improve American schools.* New York, NY: The Free Press.

Office of Research, Office of Educational Research and Improvement (OERI) of the U.S. Department of Education (1993). Student portfolios: Classroom uses. Education Consumer Guide (8). Retrieved from https://www2.ed.gov/pubs/OR/ConsumerGuides/classuse.html

Redding, S. (2014). Personal competency: A framework for building student's capacity to learn. Center on Innovations in Learning, Temple University, Philadelphia, PA

Redding, S. (2016). Competencies and personalized learning. In M. Murphy, S. Redding, & J. Twyman (Eds.), *Handbook on personalized learning for states, districts, and schools* (pp. 3–18). Philadelphia, PA: Temple University, Center on Innovations in Learning. Retrieved from https://files.eric.ed.gov/fulltext/ED568173.pdf

Schön, D. 1991. *The Reflective Practitioner: How Professionals Think in Action*. Aldershot, UK. Ashgate.

Stellwagen, J. B. (1996). Beyond rubrics and performance standards: Student learning profiles and cognitive assessment. *American Secondary Education, 25*(2), 25–31.

Twenge, J. and Campbell, WK. (2001) "Age and Birth Cohort Differences in Self-Esteem: A Cross-Temporal Meta-Analysis", *Personality and Social Psychology Review* Vol 5 number 4 Pp. 321-344.

Twyman, J., & Redding, S. (2015). Personal competencies/Personalized learning: Lesson plan reflection guide. Washington, DC: Council of Chief State School Officers. Retrieved from http://www.centeril.org/ToolsTrainingModules/assets/personalizedlearninglessonplanreflection.pdf

Yancey, K. B. (Ed.). (1992). *Portfolios in the writing classroom*. Urbana, IL: NCTE.

For more information about Personalized Learning
please visit:

www.centeril.org