An Introduction to the National Summit on K-12 Competency-Based Education

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*i*NAC☀L

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About *Competency*Works

*Competency*Works is a collaborative initiative dedicated to advancing personalized, competency-based education in K-12 and higher education. The International Association for K–12 Online Learning (iNACOL) is the lead organization with project management facilitated by MetisNet. We are deeply grateful for the leadership and support of our advisory board and the partners who helped to launch *Competency*Works: American Youth Policy Forum, Jobs for the Future, and the National Governors Association. Their vision and creative partnership have been instrumental in the development of *Competency*Works. Most of all, we thank the tremendous educators across the nation that are transforming state policy, district operations and schools that are willing to open their doors and share their insights.

About iNACOL

The mission of the International Association for K-12 Online Learning (iNACOL) is to catalyze the transformation of K-12 education policy and practice to advance powerful, personalized, learner-centered experiences through competency-based, blended and online learning. iNACOL is a non-profit organization focusing on research, developing policy for student-centered education to ensure equity and access, developing quality standards for emerging learning models using competency-based, blended and online education, and supporting the ongoing professional development of school and district leaders for new learning models.

National Summit on K-12 Competency-Based Education

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I. Introduction

Educators have been implementing competency-based education systems for decades. It was a move away from the ranking and sorting of students by the traditional education system toward a new education system designed to ensure each and every child's success. Competency-based education reflects a belief that all students can learn with the right supports. Equity is at the center of any competency-based structure that is designed to ensure consistency, fairness, responsiveness, and continuous improvement.

In March 2011, 100 innovators in competency-based education gathered at the first Competency-Based Learning Summit, the initial step toward creating a field of competency education to support educators in districts, schools, and even some states. At the time there was a lack of coherence in the field and states used different terms (mastery-based, performance-based, proficiency-based, and competency-based). In response, a working definition of competency education was created around which the field could organize itself.

Working Definition of Competency-Based Education (2011)

Students advance upon demonstrated mastery.

Students receive timely, differentiated support based on their individual learning needs.

Competencies include explicit, measurable, transferable learning objectives that empower students.

Learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of important skills and dispositions.

Assessment is meaningful and a positive learning experience for students.

Two papers were published to share developments from the 2011 Summit:

1. *Cracking the Code: Synchronizing Policy and Practice for Performance-Based Learning*
2. *It's Not A Matter of Time: Highlights from the 2011 Competency-Based Learning Summit*

Six years later, competency education is expanding across the country as a critical structure for any education system that seeks to personalize education while also staying true to the vision of equity in education. Nearly every state has created some room for innovation for competency-based education, and districts are turning to competency education because it offers a better alternative than continuing to operate within the traditional systems.

As our understanding of competency-based education has grown, so has our understanding of critical issues that must be addressed in order to ensure equity of access and outcomes as well as high quality of implementation. In response, we are convening the second National Summit on K-12 Competency-Based Education to draw on the collective leadership, creativity, and expertise of leaders across the country to chart our course for the next wave of innovation, implementation, and expansion.

This paper provides an overview of the goals of the Summit, the four papers that form the basis of discussion at the Summit, and a glossary of terms used in the four papers.

II. The Goals of the National Summit

iNACOL and *Competency*Works decided that it was time for another national summit because there are a set of large, complicated issues that need greater clarification and guidance if the competency-based education movement is to continue expanding and become sustainable. Bringing together people with diverse perspectives (regional, position, race/culture, and expertise) to consider these issues and provide guidance is an important, if not essential, step to the future success of competency education.

The goals of the National Summit are to:

1. Provide guidance on four issues currently challenging the field: equity, quality, meeting students where they are, and taking a long-term view on systems change and policy. These will be discussed in more detail below.
2. Revisit the working definition and identify what other supports might be needed to communicate issues around competency-based education in a clear and consistent way.
3. Identify the emerging issues challenging schools, districts, and states that need to be addressed.

There is a fourth goal of the Summit that cuts across these first three: to advance equity by embedding it as a core design feature of every system and structure that supports competency-based education. Our nation's history of racism and identity-based privilege is evident in every aspect of our society. Competency-based education is no different. Without an intentional focus on equity, the field of competency-based education has developed without the benefit of diverse

leadership. Too often national convenings and state leadership has been populated by leaders who were all or nearly all white. This does not reflect the diversity of leadership in the field, our students, or our aims for education. Thus, the Summit begins a mid-course correction to ensure that we draw upon the leadership of a beautifully diverse United States and that competency education is designed to serve the beautifully diverse children and communities of the United States. Participants at the Summit were invited with an intentional focus on the diversity of their individual identities and experiences, as well as that of the students and families with whom they work. This is only a first of many steps.

Expectation of Summit Leaders

At the Summit, we will spend much of the second day in small groups discussing the four issues. We expect that Summit leaders will read 1-2 papers in depth and will bring ideas for how to strengthen the ideas in the paper (and, if needed, offer alternative framing of the problem or solutions) as well as ideas for recommendations of what is needed for the field to move forward.

Each person participating in the Summit is bringing different expertise and experience, and the goal of the Summit is to tap into that knowledge as individuals as well as the collective knowledge of the group. Within the discussions at the Summit, a few key questions will lift up ideas offered in each paper for the groups to expand upon or revise. However, we assume that each leader at the Summit will want to offer many points. There will be documents within the digital Summit resources that will allow you to provide your suggestions directly into the papers. We encourage Summit leaders to provide individual feedback in any method that works best.

III. Four Issues Challenging the Field

In this section, an overview of the four issues with the key questions that were used to shape each of the papers is provided. At the end of each topic, a few more questions are added that will be the focus of discussion at the Summit. With the help of Technical Advisory Groups, people from across the nation who contributed their time, knowledge, and creativity, four papers have been created as a starting point for discussion. It is important to remember that all of these ideas can be further developed, revised, or combined—the papers are only a starting point for introducing these key issues and driving discussions at the Summit.

Equity

Driving questions in preparation of the paper *In Pursuit of Equality: A Framework for Equity Strategies in Competency-Based Education:*

✔ How can we promote equity within a personalized, competency-based system?

✔ How can competency-based learning systems and schools make outcomes more transparent and take responsibility for addressing equity issues?

✔ What do we know about improving equity? What elements should be integrated into competency-based structures? What practices should be integrated into any classroom?

✔ How can we work together as a field to ensure that competency-based systems take full advantage of what we know about equity strategies to benefit all students, especially those who have been historically underserved?

In the paper *In Pursuit of Equality: A Framework for Equity Strategies in Competency-Based Education,* three important concepts are introduced:

❯ A definition of educational equity to guide the field's conversations.

❯ A set of equity strategies that every district and school should fully integrate into instructional capacity.

❯ A framework that includes a set of guiding principles for ensuring that competency-based education is fully designed to support equity strategies and ensure all students are growing and progressing.

There is also a preliminary discussion on measuring and monitoring pace and progress of student learning, as these concepts need to be further clarified and a common understanding developed.

At the Summit, we hope to look more deeply at questions such as:

❯ Are there other equity strategies that districts and schools must have? Are there non-negotiable policies or practices?

❯ How can the equity framework be strengthened and how might it be introduced and used within the field?

❯ What are recommendations for action steps to ensure that competency-based education leads to more equitable outcomes?

Quality

Driving questions in preparation of the paper *In Search of Efficacy: Defining the Elements of Quality in a Competency-Based Education System*:

- ✔ What are the common elements of the structure in competency-based schools?

- ✔ What are the features one might expect to see in a quality competency-based school?

- ✔ What are the approaches that can be used to promote quality in a competency-based system?

Quality is necessary to realize the full potential of competency-based systems; however, defining quality, especially in an emerging field, is not easy because ideas are in flux, knowledge is developing, implementation of even the best designs is likely to be bumpy, and there is little evaluation to provide feedback. Weak design, piecemeal or poor quality implementation of competency-based education could have a damaging effect on the ability of competency-based education to advance or be sustained. Certainly, it will not provide the benefit to students realized in fully developed models.

The paper *In Pursuit of Efficacy: Defining the Elements of Quality in a Competency-Based Education System* seeks to identify what makes up the structures of a competency-based system and launches an exploration of what we might ask or see in a competency-based district and school that would be identified as high quality. In the paper, learning environments of a school are organized into four components: structure, culture, pedagogy, and learning experiences. The paper then explores nine domains of a competency-based structure with suggested questions and look-fors that would open discussion about quality.

A second section of the paper explores four options for how we as a field could create initiatives to improve quality of competency-based schools. In this section there is a discussion on the importance of clarifying college and career readiness to drive high quality competency-based schools.

At the Summit, we hope to look more deeply at the following questions:

- ❯ What does a high quality competency-based structure look like? (This will include strengthening the discussion of the nine domains.)
- ❯ What are the non-negotiable structures that must be in place to ensure quality in a competency-based structure?
- ❯ What are recommendations for how the to ensure districts and schools are implementing high quality competency-based systems?

Meeting Students Where They Are

Driving questions in preparation of the paper *Meeting Students Where They Are:*

✔ How do we know where students are in terms of academic and lifelong learning skills?

✔ What do we do, once we know?

✔ Which strategies help us navigate systemic constraints to address students' individual needs and strengths?

In the traditional system, grade-level curriculum is delivered to students based on their age, whereas competency-based systems assume that schools should be organized to meet students where they are in terms of academic, cognitive, and lifelong learning skills (growth mindset, habits of work and learning, metacognition, and social and emotional skills).

In the paper *Meeting Students Where They Are*, written by a team from reDesign, the process for knowing where students are in their learning is unpacked with a set of assumptions followed by a proposal of what needs to be in place in a school. The second section of the paper then explores what needs to be in place in a school so that teachers can better meet students where they are.

The final section identifies five strategies that schools must put in place in order to minimize the impact of the traditional environment's focus on organizing learning by age and time, which most districts operate within.

At the Summit, we will reflect upon the ideas offered in the paper and then explore the following questions:

› To what degree can the approach offered in the paper be considered as general guidance for the field? Are there other approaches or variations in how schools can meet students where they are that should be recommended?

› What are the primary challenges in navigating constraints of the traditional systems and what guidance should be provided to the field?

› What are recommendations for what needs to happen in order for states, districts, and schools to better meet students where they are?

Policy

Driving questions in preparation of the paper *Fit for Purpose: Taking the Long View on Systems Change and Policy to Support Competency Education* were:

✔ What are the issues, or *threshold concepts*, that state policymakers could be thinking about as part of a long game for transformation to student-centered learning?

✔ What main challenges need to be addressed in the long term to create enabling policies and structures needed to support a fully-developed personalized, competency-based learning system?

✔ What issues can policy start to tackle to address the challenges and create sustainable, coherent systems that help all students succeed for the long term?

The purpose of the paper *Fit for Purpose: Taking the Long View on Systems Change and Policy to Support Competency Education* is to explore and reflect on the ideas that state policy needs to address in the long term to support a transformation to competency-based education systems designed to ensure equity so all students can be truly ready for success. We will explore *threshold concepts* ("core concepts, that once understood, are needed to transform a given subject"[3]) of certifying learning; assessment literacy; pedagogical innovations based on learning sciences; and meeting kids where they are, as part of a long game strategy.

At the Summit, questions such as the following will be explored:

❯ How do we build awareness and understanding of threshold concepts for policymakers and practitioners alike? How do we begin to take action on the issues that need tackling in policy? What are the next steps for policymakers?

❯ Are there issues missing, gaps, or areas we need to further develop?

❯ How might we collectively develop a theory of change for the field of K-12 education for the long-term?

❯ What are the implications of the changing dynamics between federal and state roles in education on developing a vision for the long term?

IV. Glossary

We find ourselves in a highly creative and visionary time of deconstruction and re-design. Terminology is changing, refining, and expanding. Identifying points of intersection lead us to deeper understanding of how concepts can be woven together. The innovations of practitioners lift our expectations and open new doors. Thus, we offer the following terminology to help us communicate with each other with the understanding that it is likely that many will use different terminology or assign different meaning.

Assessment Literacy

Assessment literacy is the collection of knowledge and skills associated with appropriate assessment design, implementation, interpretation, and, most importantly, use. A critical aspect of assessment literacy is that educators and leaders know to create and/or select a variety of assessments to serve different purposes such as improving learning and teaching, grading, program evaluation, and accountability. However, the most important component of assessment literacy is the degree to which educators and others are able to appropriately interpret the data coming from assessments and then take defensible instructional or other actions.

Calibration

Calibration is a process of adjusting results based on a comparison with a known standard or "calibration weight" in order to allow defensible comparisons of student assessment results; for example, across different entities (e.g., schools, districts, states). In order to define a calibration weight, we need to have something in common, either the same students taking different assessments or different students taking the same assessments. The latter is generally more practical, so common performance tasks have been administered to students in different schools, and district performance assessments serve as a "calibration weight" to evaluate the extent to which teachers in different locales evaluate the quality of student work similarly.

Comparability

Comparability is defined as the degree to which the results of assessments intended to measure the same learning targets produce the same or similar results. This involves multiple levels of documentation and evaluation starting from the consistency with which teachers in the same schools evaluate student work similarly and consistently, to the degree to which teachers in different schools and districts evaluate student performances consistently and similarly, and finally the degree to which the results from students taking one set of assessments can be compared to students taking a different set of assessments (such as comparing pilot and non-pilot districts). A determination of "comparable enough" for any type of score linking should be made based on clear documentation for how comparability is determined and that it is defensible.

Competency-Based Education

Competency education, also known as mastery-based, proficiency-based, or performance-based, is a school- or district-wide structure that replaces the traditional structure to create a system that is designed for students to be successful (as compared to sorted) and leads to continuous improvement. In 2011, 100 innovators in competency education came together for the first time. At that meeting, participants fine-tuned a working definition of high quality competency education, which includes five elements:

> Students advance upon demonstrated mastery.
> Competencies include explicit, measurable, transferable learning objectives that empower students.
> Assessment is meaningful and a positive learning experience for students.
> Students receive timely, differentiated support based on their individual learning needs.
> Learning outcomes emphasize competencies that include application and creation of knowledge, along with the development of important skills and dispositions.

Continuum or Learning Continuum

A continuum refers to the set of standards or learning targets along a span of education (for example, K-12 or performance levels 9-12). It is the set of expectations for what students should know and be able to do. However, it does not imply that students need to learn all of the standards in a linear way or be taught them based on their age-based grade level. The student learning trajectory and research on learning progressions should inform instruction.

Curriculum

There are many definitions of curriculum in education. Internationally, the term curriculum or curriculum frameworks refers to the high level knowledge and skills students are expected to learn and describe (i.e., competencies). The curriculum framework may include student learning objectives or learning standards.

In the United States, the term curriculum also refers to the resources that teachers use when designing instruction and assessment to support student learning, including: the course syllabi, units and lessons that teachers teach; the assignments and projects given to students; the the materials (books, videos, presentations, activities) used in a course, module, or unit; and the assessments used to evaluate student learning and check for understanding. *Competency*Works will use the term learning experiences to refer to the design of the learning process and the accompanying set of resources to support student learning.

Culturally Responsive Teaching

First coined by Gloria Ladson-Billing in 1944, culturally responsive teaching is the pedagogical practice of recognizing, exploring, and responding to students' cultural contexts, references, and experiences. Cultural responsiveness builds upon eight principles:

1. Communication of High Expectations
2. Active Teaching Methods
3. Practitioner as Facilitator
4. Inclusion of Culturally and Linguistically Diverse Students
5. Cultural Sensitivity
6. Reshaping the Curriculum or Delivery of Services
7. Student-Controlled Discourse
8. Small Group Instruction

The New York City Mastery Collaborative highlights that a competency-based approach can promote cultural responsiveness in the following ways:

> **Transparency:** path to success is clear and learning outcomes are relevant to students' lives and interests. Shared criteria reduce opportunity for implicit bias.
> **Facilitation shifts:** refocus the roles of students and teachers to include flexible pacing, inquiry-based, collaborative approach to learning. Students drive their own learning, and teachers coach them.
> **Positive learning identity:** growth mindset and active learning build agency and affirm students' identities as learners (academics, race, ethnicity, gender, sexual orientation, etc.).

Deeper Learning

The term deeper learning is often used to describe highly engaging learning experiences in which students apply skills and knowledge and build higher order skills. The Hewlett Foundation defines deeper learning as six competencies: master core academic content; think critically and solve complex problems; work collaboratively; communicate effectively; learn how to learn; and develop academic mindsets. Deeper learning intersects with competency-based education in multiple ways, including defining the learning outcomes; emphasis on lifelong learning skills such as academic mindset and learning how to learn; and importance of applying skills and knowledge to build competencies.

Educational Equity

There are many definitions of equity in education. *Competency*Works will use the definition from the National Equity Project:

Education equity means that each child receives what he or she needs to develop to his or her full academic and social potential. Working towards equity involves:

1. *Ensuring equally high outcomes for all participants in our educational system; removing the predictability for success or failures that currently correlates with any social or cultural factor;*
2. *Interrupting inequitable practices, examining biases, and creating inclusive multicultural school environments for adults and children; and*
3. *Discovering and cultivating the unique gifts, talents, and interests that every human possesses.*

Equality

Equality is related to the principles of fairness and justice. It refers to equal treatment and, in the past, has been used to refer to equal inputs. *Competency*Works uses the term equality as an aspirational goal of all students reaching their full potential.

Fixed Mindset (See Growth Mindset)

Carol Dweck's research suggests that students who have adopted a **fixed mindset** — the belief that they are either "smart" or "dumb" and there is no way to change this — may learn less than they could or learn at a slower rate, while also shying away from challenges (since poor performance might either confirm they can't learn, if they believe they are "dumb," or indicate that they are less intelligent than they think, if they believe they are "smart"). Dweck's findings also suggest that when students with fixed mindsets fail at something, as they inevitably will, they tend to tell themselves they can't or won't be able to do it ("I just can't learn Algebra"), or they make excuses to rationalize the failure ("I would have passed the test if I had had more time to study"). (Adapted from the Glossary of Education Reform edglossary.org.)

The traditional system of education was developed based upon a fixed mindset and resulted in a belief that part of the K-12 system's function was to sort students.

Growth Mindset (See Fixed Mindset)

The concept of a **growth mindset** was developed by psychologist Carol Dweck and popularized in her book, *Mindset: The New Psychology of Success*. Students who embrace growth mindsets — the belief that they can learn more or become smarter if they work hard and persevere — may learn more, learn it more quickly, and view challenges and failures as opportunities to improve their learning and skills. Dweck's work has also shown that a "growth mindset" can be intentionally taught to students. (Adapted from the Glossary of Education Reform edglossary.org.)

Competency education is grounded in the idea that all students can succeed with the right supports, including learning how to have a growth mindset.

Habits of Work/Habits of Mind

Habits of work and habits of mind are directly related to the ability of students to take ownership of their learning and become self-directed learners. There are a variety of Habits of Work (specific practices or behaviors) and Habits of Mind (skills, perspectives, and orientation) that help students succeed in school or the workplace. Schools tend to focus on a few of the habits of work and mind to help students learn the skills they need to take ownership of their learning. See Learning and Leading with Habits of Mind.

Higher Order Skills/Deeper Learning Competencies

Higher order skills refer to skills needed to apply academic skills and knowledge to real-world problems. The term can refer to the higher levels on Bloom's or Webb's taxonomy or to a set of skills such as creativity, critical thinking, problem-solving, working collaboratively, communicating effectively, and an academic or growth mindset.

Learning Resources

The materials explored during a course, module, unit, or activity: videos, images, audio, texts, presentations, etc.

Learning Experiences

The term **learning experiences** is used to convey the process and activities that students engage in to learn skills and knowledge. The term refers to the package of outcomes and targets, activities, resources, assessments, and pedagogical strategies that are associated with a course, module, or unit. In the United States, this is generally referred to as curriculum. (See definition of Curriculum.)

Learning Progression

Learning progressions are research-based approaches and maps how students learn key concepts and skills as described in Achieve's briefing The Role of Learning Progressions in Competency-Based Pathways.

Learning Sciences Research

The learning sciences are concerned with "the interdisciplinary empirical investigation of learning as it exists in real-world settings."[2] Core components of learning sciences research include:

> Research on thinking: including how the mind works to process, store, retrieve, and perceive information;

> Research on learning processes: including how people use "constellations of memories, skills, perceptions, and ideas" to think and solve problems, and the role that different types of literacies play in learning; and

> Research on learning environments: including how people learn in different contexts other than a direct instruction environment with a core principle of creating learner-centered learning environments.[3]

Lifelong Learning Skills

In the paper Lifelong Learning Skills for College and Career Readiness: Considerations for Education Policy, AIR describes lifelong learning skills as providing "the foundation for learning and working. They broadly support student thinking, self-management, and social interaction, enabling the pursuit of education and career goals." *Competency*Works uses the term to capture the skills that enable students to be successful in life, navigating new environments, and managing their own learning. This includes a growth mindset, habits of work, social and emotional skills, metacognitive skills, and higher order/deeper learning competencies.

Moderation

Moderation is a process used to evaluate and improve comparability. The process involves having teachers (or others) work to develop a common understanding of varying levels of quality of student work. Moderation processes are often used as part of calibration, but moderation is a way to evaluate comparability while calibration is the adjustment based on these findings.

Personalized Approach to Learning or Personalized Learning

iNACOL defines personalized learning as "tailoring learning for each student's strengths, needs and interests – including enabling student voice and choice in what, how, when and where they learn – to provide flexibility and supports to ensure mastery of the highest standards possible." Personalized learning takes into account students' differing zones of proximal development with regards to academic and cognitive skills, as well as within the physical, emotional, metacognitive, and other domains.

Barbara Bray and Kathleen McClaskey explain in the PDI Chart that personalized learning is learner-centered, whereas the related approaches of differentiation and individualization are teacher-centered. Thus, teachers may use a personalized and differentiated approach to meet students where they are.

Social and Emotional Learning

According to CASEL, "social and emotional learning (SEL) is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships, and make responsible decisions." They focus on the development of five competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.

Student Agency

Student agency or student ownership of their education refers to the skills and the level of autonomy that a student has to shape their learning experiences. Schools that want to develop student agency will need strategies to coach students in the lifelong learning skills (growth mindset, meta-cognition, social and emotional learning, and habits of work and learning) and to establish practices that allow students to have choice, voice, opportunity for co-design, and the ability to shape their learning trajectories.

Student Learning Trajectories

*Competency*Works refers to trajectories as the unique personalized path each student travels to achieve learning goals on the way to graduation. Educators apply what is known about learning progressions toward helping students make progress on their trajectory.

Universal Design for Learning (UDL)

CAST defines Universal Design for Learning as "a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn." UDL guides the design of instructional goals, assessments, methods, and materials that can be customized and adjusted to meet individual needs.

Zone of Proximal Development (ZPD)

A term developed by psychologist Lev Vygotsky to refer to the moment(s) during the learning process that lives between what one can do on one's own and what one cannot do at all. It is the zone in which guidance and support is needed in order to become independently competent. A personalized approach to learning provides students with access to learning experiences attuned to students' individual ZPD—which sometimes overlaps with others', but frequently may not.

V. Concluding Comments

The issues of equity, quality, policy for the long-term, and meeting students where they are are all important to expanding the field of competency education. They are not issues to be resolved but instead should be explored in a fruitful way that leads to greater understanding and opportunities for new insights, and will hopefully be woven into the next generation of education. This field could not have advanced as far as it has without the generous, collaborative spirit of its leaders. We look forward to what we can accomplish together.

Endnotes

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