

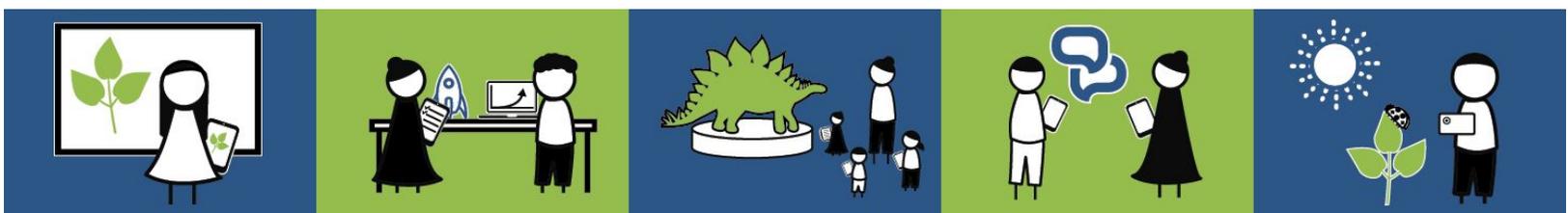


Making Competency Based Learning Real for Educators

A Project of the TLA Next-Gen Human Capital Initiative

By Beth Rabbitt, TLA & Margaret Roth, Yet Analytics, November 2015





Project Background

Transforming teaching and learning requires transforming approaches to educator training and development.

Over the last two years, The Learning Accelerator (TLA) has been working with a select group of human capital organizations to design, develop, and launch a series of critical supports for teachers and leaders making the shift to blended learning. This initiative has resulted in a series of new open tools, frameworks, and learning content for educators.

However, despite the tremendous value of these new assets, our work together is not complete. One of our key learnings is this:

New models for adult learning must reflect the level of personalization, competency-based learning, and effective use of data that we are asking educators to implement in their classrooms.

To accomplish this, we need to create a common language and frame to help users identify resources and learn across organizations and platforms, making it possible for content to be more accessible to educators at all levels as well as allow educators to more effectively own and track their learning. Content and data must be made more interoperable.

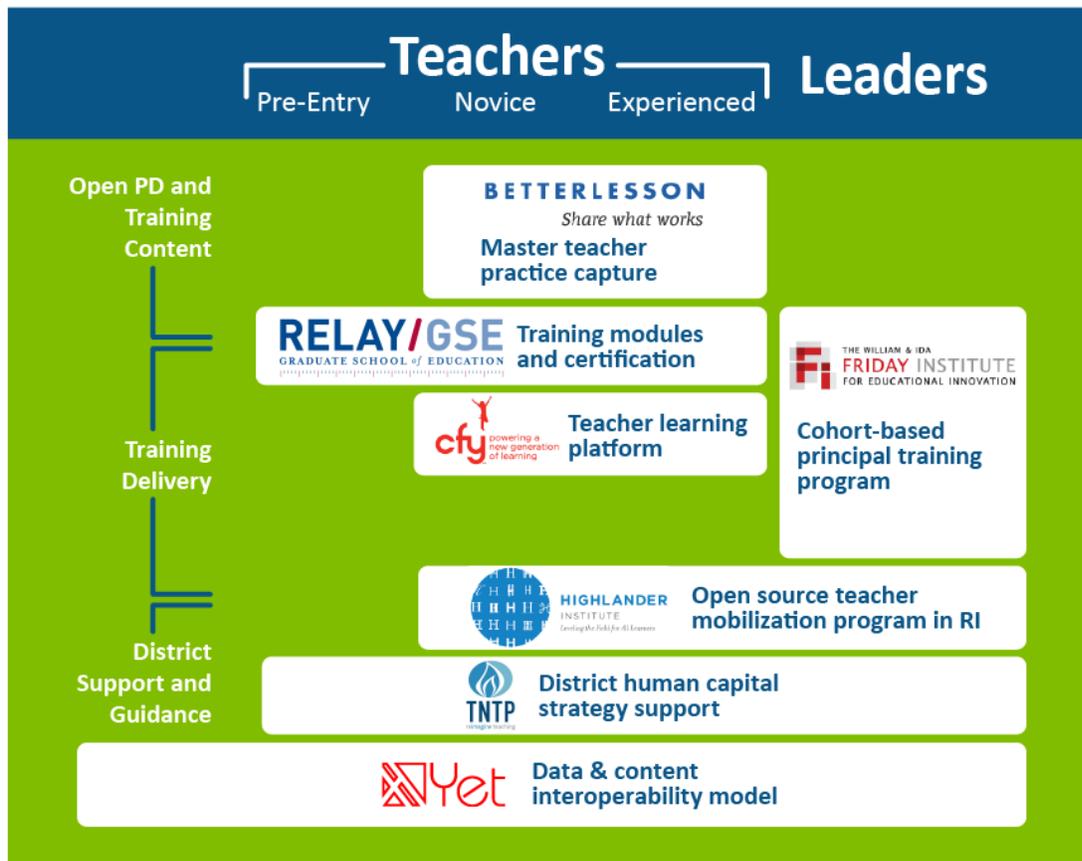
In January 2015, TLA and our grantees partnered with Yet Analytics to launch a new project to help solve exactly this problem, seeking to map the open content created by Initiative grantees, connect them to a shared competency-based framework using a data interoperability specification, and explore how this concept model could be used as an open standard for professional training and development.

The content presented in this whitepaper represents the progress and working concept model for this project.

About TLA and the Next Gen Human Capital Initiative

TLA is the catalyst to transform American K-12 education through blended learning. We seek to help scale approaches to teaching and learning that are highly personalized, competency-based, and use real time data in districts across America. Core to this work is transforming approaches to training and developing educators. We are providing support and resources for education human capital—teachers and leaders—so they can thrive in schools and enable students to succeed.

TLA launched the Next Generation Human Capital Initiative, selecting an initial cohort of human capital grantees in the spring of 2014. These six organizations all tackle the challenge of adult development from different angles and at different stages of educator development, but share a vision for providing more open and effective human capital supports for evolving school models. Over the last year, these grantees have moved forward to develop and release a wave of support for schools nationally, working together to share ideas and resources.



Vision for a New Approach to Educator Learning

Access the right materials, to support the right competency development, at the right time, through a shared system for competency-based educator development.

Educators and talent developers face major data interoperability and content portability challenges. There is a lack of common language for what educators need to learn and to execute upon in new school models. Resources for learning are fragmented onto multiple, often closed, platforms. Data about when and how learning happens is scarce, and when it does exist it is shared and analyzed in ways that paint a bigger picture of skill and competency.

These challenges are purely technical and entirely solvable.

This project aims to create an open, adaptive starting point connecting our Initiative's individual programs and resources through an accessible and open standard for teacher development content and experiences. Together, we are developing a system, an "Educator Learning Model", in which teachers and leaders have an actionable, data-based, real-time map for modeling educator competency-based learning that gives them **the ability to access the right materials, to support the right competency development, at the right time, through a shared system for competency-based educator development.**

There are three major components of this Model work:

1. **Develop a shared language for educator competencies.** Too many of our existing educator supports lack direct alignment to a shared, clear picture of what educators need to learn. This results in fragmented credentials, degrees, and continuous education hours that don't really add up in an integrated way. The TLA cohort grounded our conversations and mapped content to a common set of educator competencies that we felt were a good start for blended learning environments—the [iNACOL Blended Learning Educator Competency Framework](#). To make these competencies more actionable, we further needed each educator learning standard from the iNACOL Framework to be parsed into highly specific, action-based learning Elements, to allow for more granularity and measurability.
 2. **Create a shared tagging mechanism for connecting learning resources across platforms.** Each of the cohort organizations own and locally host their content independently in the platform and format of their choice, which allows for continued future growth and iteration. Educators need ways to find content addressing the same learning topics across these platforms easily, so
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we needed a common tagging model for all of the resources based on all of the learning Elements identified in the competency set. This allows for content to be searchable by topic as well as by more specific learning objectives.

3. **Connect the back-end learning data.** Once a shared language for competency and content tagging is created, we needed a common format for data coming out of activities and assessments. Yet developed a model for solving the interoperability and portability challenge through a system of data exchange using the Experience API (xAPI), a data specification that makes it possible to collect, standardize, and analyze, experiential learning data from any source, across systems.

The Educator Learning Model

Theory + Practice + Data



To achieve our vision, we created an **educator learning model to bridge competencies and content.**

The conceptual model is made up of seven Skill Areas, which map to both educator competence standards as well as the learning content created by our human capital providers. Each Skill Area has a group of Tags. The specific Tags within each area can be used across a wide range of platforms, mediums, and experiences. They are linked directly to the more granular learning Elements of the iNACOL Blended Learning Educator Competency Framework standards. These Elements serve as the bridge between the larger Competencies, Tags, and learning data collected.

We have created a structure for professional learning content that bridges the theoretical and aspirational learning competencies (such as the iNACOL framework) with the day-to-day, grounded practice perspective of working educators.

The graphic above and details below outline the seven Skill Areas and nested learning Tags. Each of these Areas and its related Tags are described further below. These Tags represent content categories educators engage in as they build competency in Skill Areas. Each Tag is divided into a set of key learning Elements that represent the actions educators take that lead to the development of competency in the Skill Areas.

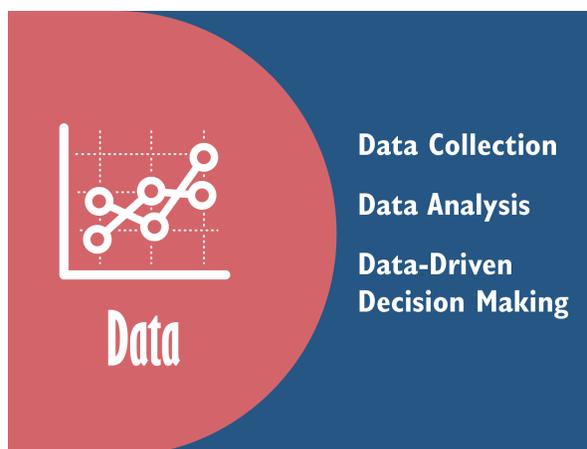
[Click here to explore the Elements and connections between iNACOL's Framework and TLA's Educator Learning Model in depth here.](#)

Note, while the model connects back to blended learning focused-competencies and content given the nature of the Initiative work, it is organized to be more universal by using larger, more general Skill categories that could expand and link to other competency frameworks as well.

Data

This Area involves all the competencies educators use to gather, track, make sense of, plan, and act upon information about learning.

- **Data Collection:** Collecting various formal and informal data sets on student learning over time.
- **Data Analysis:** Using various data sets collected over time to make assessments on student learning.
- **Data-Driven Decision Making:** Using collected data to make informed instructional decisions.



Delivery

This Area involves all the competencies educators use to execute instruction in the classroom.

- **Responsive Content:** Adapting content to individualized student needs.
- **Technology Integration:** Using technology to improve the student learning experience.
- **Competency Tracking:** Documenting student competencies through formal and informal evidence on an ongoing basis.
- **Engagement Strategies:** Delivering instructional content in ways that increase student buy-in and ownership.
- **Delivery Mechanics:** Using appropriate delivery mechanics, modalities, and time management to enhance instruction.



Planning

This Area involves all the competencies educators use behind-the-scenes to create plans for student learning.

- **Instructional Design:** Planning, choosing, and developing instructional methods.
- **Content Development:** Choosing, creating, and adapting instructional content.
- **Alignment to Standards:** Aligning instructional content to appropriate learning standards.



Development

This Area involves all the competencies used by educators to get better at their jobs.

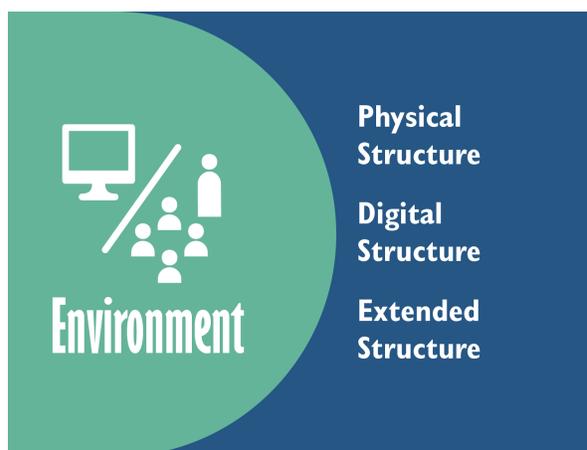
- **Adaptation:** Having a growth mindset and willingness to adopt new technologies, modalities, and change.
- **Independent Learning:** Independently pursued professional learning.
- **Professional Practices:** Contributing to school, community, and profession.
- **Reflective Practices:** Written or verbal reflection on learning, practice, and improvement.
- **Learning Communities:** Online PLN, in-person peer gatherings, alumni programs, etc.
- **Development Mechanics:** Engagement in workshops, self-paced learning, mentorship, and training.



Environment

This Area involves all the competencies educators use to create the environments within and outside of school walls that are most appropriate for and conducive to learning.

- **Physical Structure:** Design, layout, and use of physical learning environment.
- **Digital Structure:** Design, implementation, and use of digital learning environment.
- **Extended Structure:** Design opportunities to use resources outside the classroom.



Culture

This Area involves all the foundational, non-instructional competencies educators use to nurture a healthy learning environment.

- **Routines:** Consistent processes for student and teacher workflows.
- **Expectations:** Establishing positive behaviors for classroom culture.
- **Support:** Structures, strategies, and facilitation to create a constructive learning environment.



Collaboration

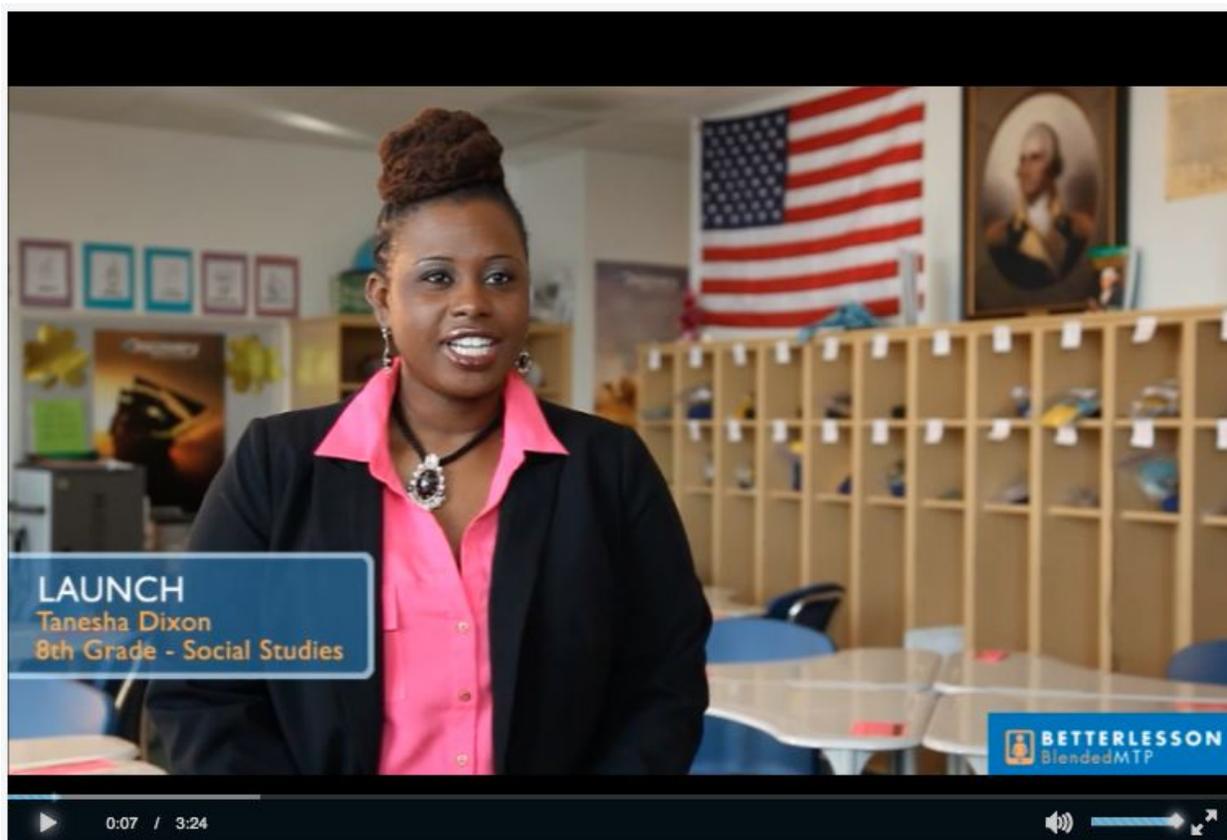
This Area involves all the competencies educators use to work effectively with other stakeholders in and outside of school.

- **Communication:** Using current tools and modalities to communicate with students, parents, teachers, community, and peers.
- **Family Engagement:** Building the relationship between learning in the classroom and learning at home.
- **Student Engagement:** Developing ownership and agency in students.
- **Community Engagement:** Building the relationship between the classroom, community, and school.
- **Feedback:** Providing opportunities for feedback between students, parents, teachers, peers, and community.
- **Teamwork:** Actively collaborating with peers, students, parents, teachers, or community members.



An Example

Connecting learning content with competencies in a unified format.



This [video](#) resource is part of the [BetterLesson Blended Master Teacher Project](#), content created from one of the TLA Human Capital Cohort grantee projects. The content focused on one strategy as developed and shared by one of their Master Teachers, and focuses on how to set up routines and structures to help students take ownership and get started at the beginning of each class.

In our Model, an educator (or educator developer) might be looking for learning content in one of two distinct ways:

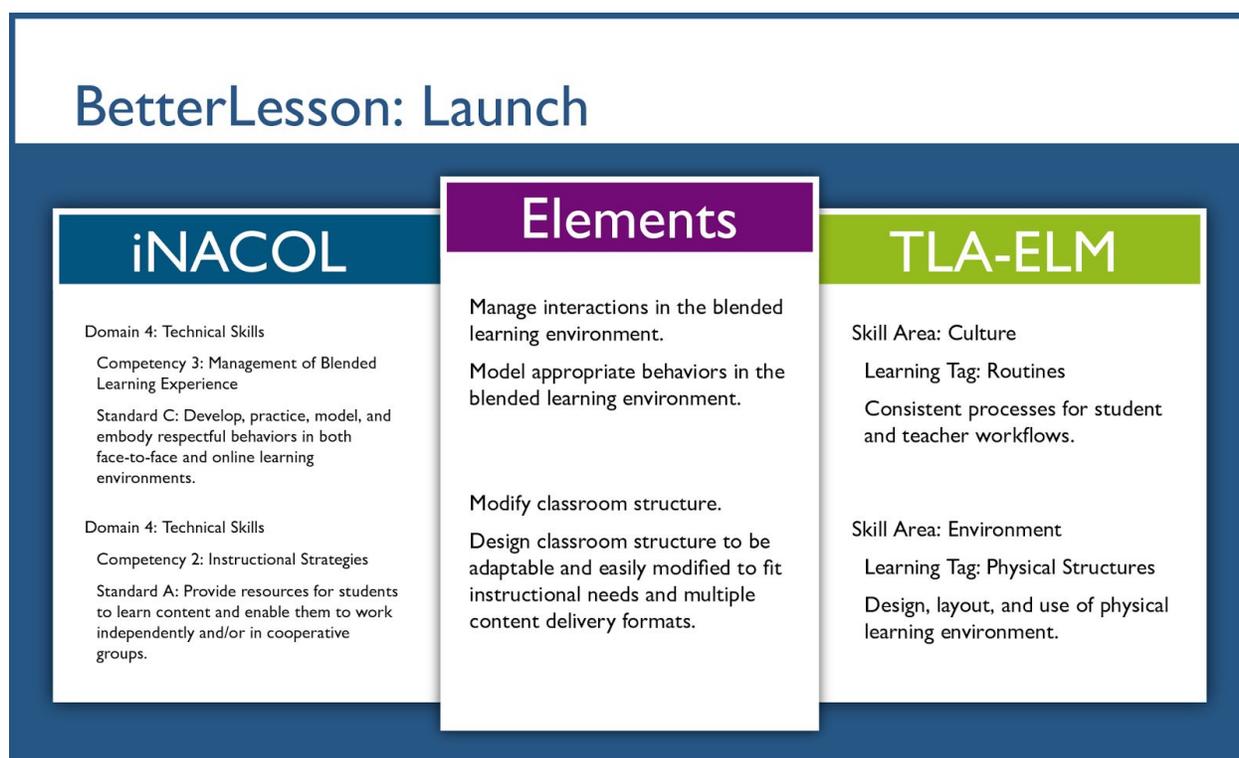
1. **Competency specific.** In a certain number of cases, an educator may have a specific learning objective based upon a learning gap he or she has identified. For example, after reading the iNACOL Framework, or getting feedback based upon an aligned observation rubric or self assessment, the educator has identified a domain or standard for learning and improvement.
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The educator knows what competency it is he or she wants to build, and needs to find content specifically targeted to the competency. The educator will search based on competency.

2. **General interest or topic.** In most other cases, an educator will know they want to find content based upon a more general area or specific instructional challenge—for example, an educator might be struggling with setting up class expectations for his or her blended approach and wants to find out how other educators solve the problem. The educator hasn't connected this learning need to a specific competency, so they will search more generally by a content tag.

The goal with the Educator Learning Model (ELM) was to create a way for any educator to solve the problem in either of these cases—from either a competency-specific or more general end. Further, we wanted to make sure that regardless of how a learner found content, the data on how they ended up using or learning from it could be shared across platforms.

For example, the video content above links to both the Educator Learning Model and the iNACOL Framework through the sharing of Elements.



This particular piece of content links through Elements in the iNACOL Framework to one Competency Domain and two corresponding Competencies and to the Educator Learning Model through two Skill Areas and two learning Tags.

Educator Learning Model + iNACOL Framework

While the iNACOL Framework groups both of these qualities under one Domain, Technical Skills, the Educator Learning Model focuses on more practice-based content groupings, here emphasizing the relationship to culture and environment in the strategy. Here, the "Culture: Routines" Tag ties back to the iNACOL Framework as "Domain 4: Competency 3: Standard C," while the "Environment: Physical Structures" Tag ties to "Domain 4: Competency 2: Standard A."

This shallower tree with practice-based groupings and less formal language is designed for usability, both for educators and content creators.

Additionally, by creating a tagging model that is centered around practice but that links back to the iNACOL Framework, a unified standard is made possible that can be used both from a policy and practical perspective.

Project Future

A competency-based system that creates opportunities for personalized learning for educators, across content, format, and time.

The benefits of a unified tagging system for content begin at the level of findable content, but extend forward to a truly personalized model for discovering, tracking, and improving educator professional development.



One of the most exciting implications for a system like this—one making interoperability of content, platforms, systems, and learning possible through data—is the potential for a distributed system for both finding and measuring success within all different kinds of learning opportunities.

With this conceptual model in place, content providers can now meaningfully link their learning resources to competencies by tagging their content. To put this model into action, we will need to pilot the system with educator learners, who can use content and track their development against competencies. The next stage of growth for this project is a unified search tool to allow educators to find professional development content based on the Educator Learning Model.

Beyond that, further development would create a personal dashboard for educators to track their own professional learning across platforms, to identify learning formats that work best for them, and to recommend content areas that are best suited for their current needs. Additionally, a system that enables educator developers to facilitate the professional development of educator teams through recommended content and learning opportunities could be created.

Outside of the work with blended learning teacher education, TLA sees opportunities for competency-based professional education, measurement, and learning that can be founded on the work of this concept model. Through the development of profession specific competencies, content, and open data activity registries through xAPI, competency-based professional development could become the standard across industries and across professions.

About the Process

Working with leaders in the blended learning professional development space to build a robust model.

In setting out to develop this competency-based, interoperable, blended-learning focused model for teacher learning, we asked several key design questions:

- How do you measure success in the development of the skills associated with blended learning?
- How do you demonstrate the achievement of competencies?
- How do you track the progress of the development of competencies?
- How do you quantify the skills associated with blended learning?
- How can content be shared, searched, and accessed across platforms and providers?
- How can engagement with content be aggregated to show learning?
- How can the theory of blended learning and the practice of blended learning be unified?

Looking at our learning content as well as the TLA and iNACOI Blended Learning Educator Competency Framework, we undertook two parallel activities:

1) We translated the Educator Competencies to more granular, action-oriented learning objectives, which we termed "Elements." The original Framework, which was created by a diverse committee of practitioners and leaders to describe the qualities of good blended learning teachers, it does not sufficiently identify the actions of good blended learning educators in practice. By breaking each competency standard into Elements, we developed a set of include an atomic, actionable, and most importantly practice-based Elements, that correspond to the Framework's Standards, Competencies, and Domains.

This step helped us answer some of our our original design questions. The Elements are actionable, they can be measured, they can be demonstrated, they can be quantified, and they can be observed. However, theory and practice remained distanced and there was not a way to account for the many ways in which individual pieces of content could be aligned to many of the Elements themselves.

2) We independently mapped all of the learning content created by human capital providers, and then compared it to the universe of learning Elements from the Competency Framework. Our comparative analysis of the content created by providers based on real-world context and observation of blended learning environments and educator professional development helped us create a set of competency Skill Areas, with more granular learning Tags. These Skill Areas also directly correspond to the discrete learning Elements from the Framework.

Putting these three pieces of work together, we created a model that could link our content to competencies as well as transform learner activities into discrete pieces of data. In the Educator Learning Model, Skill Areas, learning Tags, and learning Elements are nested, and are directly related back from the learning Elements up through the Standards, Competencies, and Domains identified in the iNACOL Framework. Additionally, individual pieces or grouped modules of content can be tagged with multiple learning Tags and thus shared learning Elements. **This allows for a system for measuring educator competency development over time. This bridge has made it possible for the theory of blended learning teaching and the practice of blended learning teaching to be unified through data.**

We've made great progress in this work, but are also confident that teaching and learning practices, resources, school models, and learner needs will grow and change over time. Therefore, the Educator Learning Model has been designed to develop, grow, and change alongside the technologies, theories, and best practices of education through a modification process.

About the Partners

Creating open PD Content and Developing a Scalable model for blended educator Competencies.

As part of [TLA's Human Capital Initiative](#), TLA has made investments in a number of organizations to create freely available professional development and talent management resources as well as to build the capacity of providers who are working with districts and states. These organizations have been working together as a team to share lessons learned and resources, acting as a wave of support for the field. These organizations have now come together in support of TLA's Educator Learning Model.

[Yet Analytics](#) - Yet Analytics builds software that helps organizations leverage advanced data and analytics for the purpose of improving human capital, training, and decision making. Yet Analytics' mission is to improve the lives of people and the outcomes of the organizations they serve by making the data of the connected world more visible, accessible, and actionable.

[BetterLesson](#) - BetterLesson is a teacher-founded education technology organization that empowers teachers to drive their own professional learning. The organization is working with 11 “master” blended teachers across the country to capture and share classroom and personal teaching practices. Educators across the country can learn about their approaches and see the work in action through online videos, artifacts, and teacher commentary through the [Blended Master Teacher Project](#). BetterLesson supports the professional development work of blended teachers through their Blended Design Studios and [PersonalizedPD](#) programs.

[PowerMyLearning](#) - PowerMyLearning (formerly, CFY) is a national education nonprofit that helps students in low-income communities, together with their teachers and families, harness the power of digital learning to improve educational outcomes. The organization is working to leverage its existing student-facing platform to create a personalized professional development approach for educators.

[Friday Institute](#) - The Friday Institute, based at NC State University, is advancing education through innovation in teaching, learning and leadership by bringing together students, teachers, researchers, policy-makers, educational professionals, and other community members to foster collaborations in improving education. Friday Institute has created the Leadership in Blended Learning Program, which is a new national principal training program. The program, launched in January 2015, includes 7 initial pilot partners projected to serve over 300 leaders across the U.S.

[Highlander Institute](#) - Highlander Institute is a non-profit community of educators and professionals working to improve the educational experience of all learners. The Highlander Institute has developed and mobilized a network of teacher trainers to provide districts across the state of Rhode Island with consulting, professional development, and technical assistance. Through this multi-year effort, called [Fuse RI](#), Highlander is creating an open source models to catalyze change through blended and personalized learning.

[Relay Graduate School of Education](#) - Relay’s mission is to teach teachers and school leaders to develop in all students the academic skills and strength of character needed to succeed in college and life. Relay created a series of open access, graduate-level training courses to help teachers across the country learn how to implement blended learning in their classrooms. The [courses, which are available to the general public for free](#) tackle topics ranging from understanding essential teacher mindsets to creating a blended classroom culture to using data to inform student learning pathways.

[TNTP](#) - TNTP works with schools and districts nationwide to ensure poor and minority students have outstanding teachers. TNTP has [developed advice and talent tools](#) for school district human capital systems to support the transition to blended models.

Introducing the Learning Commons

This whitepaper was created as an archive of the original web content produced by TLA and Yet Analytics to announce this work at iNACOL 2015.

This project has now moved into the implementation phase as the Learning Commons. The Learning Commons is a shared space where:

- Educators can search across curated professional learning resources to solve challenges and begin to transform teaching and learning in their classrooms.
- Resource providers can contribute content, tools, and ideas to support and develop learners, while getting real-time feedback on value and impact.
- Learning leaders can connect to groups of learners and share curated resources based on personalized, competency-based learning goals.

For more information, please connect with Yet Analytics at hello@yetanalytics.com or info@learningaccelerator.org or visit us at <https://www.learning-commons.org>.

