P20

KENTUCKY P20 INNOVATION LAB

A PARTNERSHIP FOR NEXT GENERATION LEARNING

Overview:

The University of Kentucky is presently building the Kentucky P20 Innovation Lab: A Partnership for Next Generation Learning (www.p20lab.org). The P20 Innovation Lab will serve as the launching point for a transformation of education in Kentucky. While hosted and partially supported at the University of Kentucky, the Kentucky P20 Innovation Lab is a state-wide, collaborative space to bring researchers, state personnel, school district leaders, teachers, parents, business leaders, nonprofit organizations and other community members to collectively propel new innovations in Kentucky education. It is an incubator of new and promising educational ideas. It is a technology hub and learning distribution mechanism. It is systemic in orientation but grassroots in operation because to meet the demands of the digital, global age we need both bottom-up and top-down change simultaneously. As the state university, the University of Kentucky is uniquely positioned to facilitate the conversations, research, experimentation, partnerships, policy changes and statewide scalability to help us transform education for every child in Kentucky. With leadership provided by the Kentucky Department of Education and guidance from the Council of Chief State School Officers, the Partnership for Next Generation Learning at the Kentucky P20 Innovation Lab will develop, implement, test, and scale the future of learning in Kentucky.

Why Now:

Several critical components have led to the establishment of this effort. First, in 2009 the University of Kentucky College of Education hired Dr. Mary John O'Hair as our ninth dean. Dean O'Hair comes to us from Oklahoma where she served as Vice Provost for School and Community Partnerships. One particular partnership that she was instrumental in starting in Oklahoma was the K20 Center, based at the state university, the University of Oklahoma. Through a series of large grants, private donations, community partnerships and work with state education entities, the K20 Center worked with 794 schools representing a relationship with 96 percent of Oklahoma school districts. This work was supported by over $40 million in external funding from such partners as the Bill and Melinda Gates Foundation, British Petroleum, the National Science Foundation and the United States Department of Education. Through the K20 Center's growth, it established a five phase change model beginning with school leaders and ending with students. Schools that engaged with the K20 Center's change model showed a 74 percent greater increase on the state's Academic Performance Index than the state

average increase. Dean O'Hair was hired by the President of the University of Kentucky, Lee Todd, with explicit instructions to replicate Oklahoma's successes.

Second, as a state, Kentucky is circling the wagons for education. Twenty years after the landmark 1989 *Rose v. Council for Better Education* lawsuit and subsequent Kentucky Education Reform Act, Kentucky is once again tackling the major challenges within our education system. The Kentucky Legislature in 2009 passed Senate Bill 1, landmark legislation that reoriented Kentucky's educational standards, assessments and accountability systems. It demanded a new level of cooperation across the entire P20 educational system. Further, Kentucky is the first state in the nation to adopt the Common Core State Standards. To achieve the ambitious education reform agenda, a new level of cooperation has emerged between the Kentucky Department of Education, the Council on Postsecondary Education and the Kentucky Education Professional Standards Boards. This cooperative leadership has filtered down to Kentucky educational cooperatives, local school districts and community partners. To help spur innovation, Kentucky Governor Steve Beshear, has formed and taken leadership of a statewide taskforce squarely aimed at Transforming Education in Kentucky. Coupled with federal education spending and innovation demands, the winds of education innovation are blowing as strong now as they did twenty years ago.

Third, we are now living in an era of disruptive innovations. The globalization and digitalization of the world economy has displaced traditional institutions and replaced them with new and innovative structures. At the turn of the twenty-first century business was in turmoil rapidly reinventing itself toward the service and creative class economy, yet our students have lingered in an outdated system of schooling for the agricultural and industrial ages past. Other countries have not stood as still in the face of this change, and thus a global achievement gap has developed. Meanwhile, as our students connect, our schools disconnect. Advances in technology have revolutionized information and learning. Google, wikis, video sharing, a gaggle of gadgets and the Internet itself have changed the distribution of information and the relationships based on that information. Our students have been born digital, raised digital, and will enter a digital world as adults, yet our schools are still analog and thus are becoming dangerously irrelevant. But, our current environment also presents an opportunity for a new kind of disruptive innovation in our classrooms.

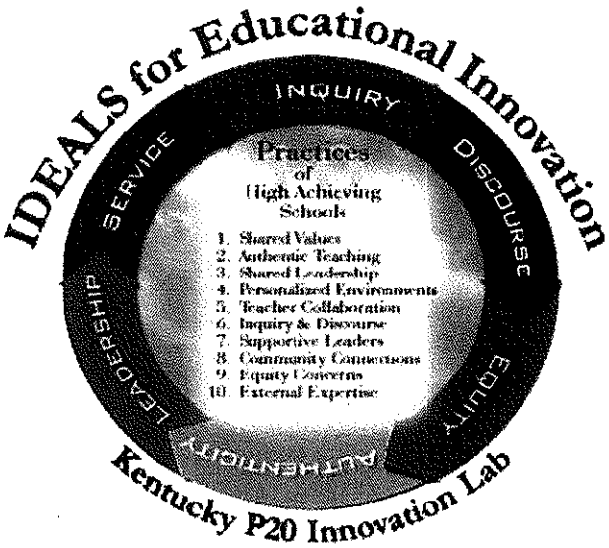
University of Kentucky Commitment:

Because of these challenges and opportunities the University of Kentucky has invested in the P20 Innovation Lab infrastructure, even in these challenging economic times. Over the course of three years the University of Kentucky has committed $1.5 million in seed money to build a sustainable educational innovation infrastructure. This investment toward advancing education is in keeping with the university's land-grant mission to serve the entire commonwealth. Not only has the University of Kentucky provided its own resources to fund the Innovation Lab, it has also mobilized its entire development operation to obtain additional funding from donations. The University has also directed all 17 of its Colleges to have a commitment to advancing education in local schools, working with the P20 Innovation Lab. Thus, the University of Kentucky is bringing all of its resources, from the nearly billion

dollar endowment to faculty research to scholarships to teaching, to advance the cause of helping the next generation of learners in Kentucky.

P20 Innovation Lab Philosophy:

Based on a career of research, the Kentucky P20 Innovation Lab's central philosophy is based on Dean O'Hair's work in building democratic school communities. Creating schools in this mold requires a refocusing of the school environment on the learning needs of students. All organizational and community members reorient their efforts to primarily serve student learning. Thus, the mission of the Kentucky P20 Innovation Lab is "To create, develop and apply new knowledge to address the most critical education issues of our time, locally and globally, in partnership with our students, colleagues across the university, and individuals and institutions with an interest in bringing innovation to our collective educational future."



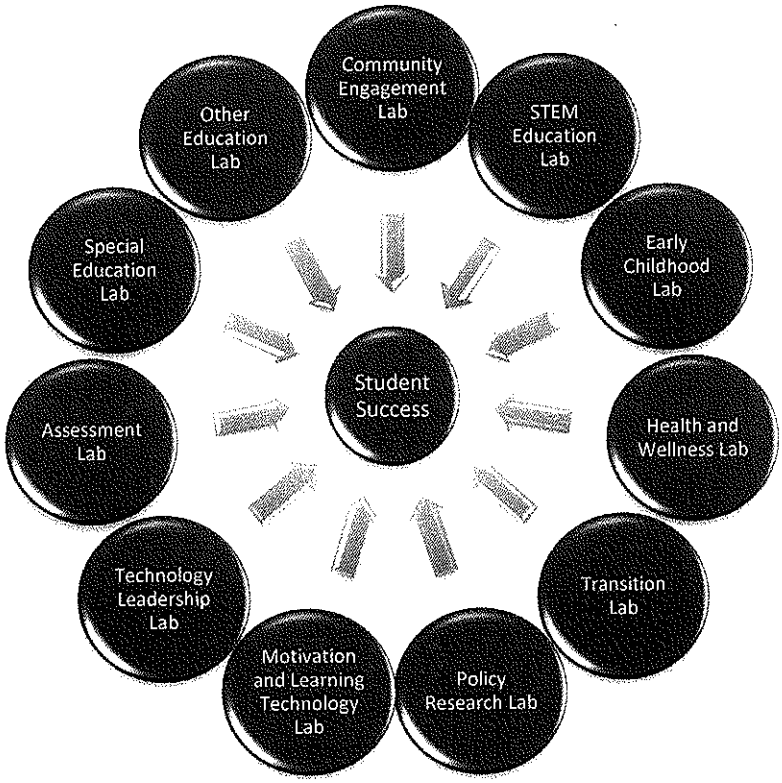
To achieve this mission, like our partners in Oklahoma, the Kentucky P20 Innovation Lab will rely on the IDEALS framework (Inquiry, Discourse, Equity, Authenticity, Leadership and Service). This framework sets the stage for the 10 research-based practices of high-achieving schools. These research-based practices inform all of the P20 Innovation Lab's work in developing new learning opportunities in schools and also closely conforms to the six critical attributes of learner-centric education.

The Lab Framework:

The Kentucky P20 Innovation Lab is actually composed of a series of smaller, issue-based labs. Because the Commonwealth is facing a variety of interrelated challenges, an interrelated structure was built to devote innovation attention to each of these issues, while maintaining the relationships with other issue-based labs.

While the issue-based labs will have a great deal of autonomy and flexibility, the central lab will retain approval, coordination and evaluation responsibilities for the work of the issue-based labs. The chief officer of the lab structure will be the Commissioner of Education in Kentucky. An Advisory Board will work in coordination with the Commissioner to oversee the lab structure and fulfill the approval and evaluation responsibilities. The Advisory Board will consist of educational leaders in Kentucky, including representatives of the Council on Postsecondary Education and the Education Professional Standards

Board. The Advisory Board will also consist of select educational cooperative leaders, superintendents, and higher education officials both from the University of Kentucky and from our sister institutions in the state.



The Dean of the University of Kentucky College of Education will oversee the day-to-day operations of the lab infrastructure in cooperation with Kentucky Department of Education leadership and CCSSO representatives, each of which will be provided office space in the P20 Innovation Lab. The University of Kentucky will also employ additional central staff to implement the innovation lab structure, including, possibly, an executive director hired in conjunction with our partners.

The P20 Innovation Lab will oversee a series of issue-based labs tasked with driving educational innovation. The University of Kentucky has committed to providing both graduate and undergraduate student support to each of these labs, once approved. Any Kentuckian can direct one of these innovation labs, including state personnel, district personnel or faculty from other universities in the state. Working in conjunction with educational cooperatives, district partners or other universities, the issue-based labs may even be housed in other locations. The University of Kentucky College of Education will support all of the labs that are approved by the P20 Innovation Lab Advisory Board and Commissioner of Education.

The responsibilities of each of the issue-based labs will be to engage community partners, pursue additional funding opportunities, provide high-quality professional development for educators, disseminate research findings to practitioners, suggest policy improvements, and other responsibilities as assigned by the P20 leadership in cooperation with national partners. All of the activities of the issue-

based innovation labs will be embedded within the critical attributes of a learner-centered education. But, outside of these basic responsibilities, the innovation labs will purposely retain a great deal of independence and flexibility. Such flexibility is essential to innovation and care will be taken to prevent excessive bureaucratic interference with the innovation process, while assuring that all laws and regulations are implemented properly to protect the public interest and the interest of students.

The figure on the previous page shows some of the possible issue-based innovation labs that are currently at some stage of development, but it does not present an exhaustive list. The flexibility in the issue-based lab structure calls for the formation of labs when issues arise and the closure of labs if other priorities take precedence. For example, responding to the Kentucky Council on Post-Secondary Education's commitment to "double the numbers" of Kentuckians completing baccalaureate degrees, work is underway to develop a **Transitions Lab** that would identify key issues in transitions to post-secondary education for Kentucky students. The goal of this lab would be to support innovative research in P-12 college readiness, the first-year undergraduate experience, and transfer preparation for community college students. The Transitions Lab hopes to partner with state education agencies as well as private foundations and corporations invested in increasing college access and degree attainment. Additional partners will be sought amongst regional private and public higher education consortia with careful attention to engaging the communities and schools from which students come and the post-secondary institutions in which they enroll.

The **STEM Education Lab** and its partners are creating a comprehensive vision to increase the number of transformative teachers in science, technology, engineering, and mathematics (STEM) through strategic planning and systemic alignment of pre-school through graduate education (P20) programs. The vision is linked directly to the Association of Public and Land-Grant Universities (APLU) Science and Mathematics Teacher Imperative (SMTI) and is designed to (1) recruit and prepare STEM teachers; (2) provide ongoing, internationally-recognized best practices in professional development to existing teachers and school leaders; (3) conduct extensive educational research; and (4) translate research findings into innovative practices that emphasize higher-order thinking and other 21st century skills.

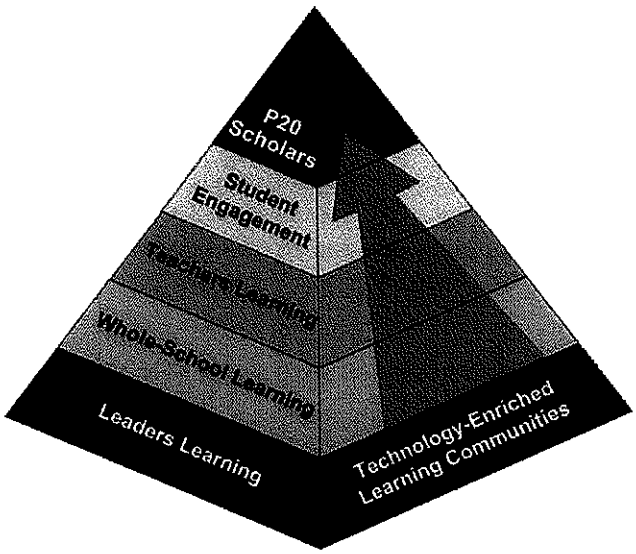
Also under development is an **Assessment Lab**. Challenges this lab may take on include providing professional development experiences for Assessment Coordinators throughout the state; developing professional learning modules (that could be accessed online) to address critical assessment issues; offering on-site professional learning experiences for teachers and school leaders on the development and use of high quality classroom assessments; offering guidelines to help teachers interpret and use assessment results to improve instructional practices; and leading efforts to develop standard-based report cards to facilitate communication with parents regarding students' learning progress.

Initiative 1, The Five Phase Model:

While the issue-based innovation labs will frequently engage in independent activities, multi-lab initiatives will also advance the core work of educational innovation in Kentucky. The first such broad-based initiative that the Kentucky P20 Innovation Lab will undertake is the implementation of the

Oklahoma five-phase model that met with such success. With creating a culture of innovation as a core mission, the five phase model starts by addressing school leaders' capacity to adapt to and implement changes in school culture and teaching methods and helps them lead schools as they transform into technology-enriched learning communities. For instance, with innovation in schools frequently restrained by the knowledge of the school leader, the growing digital knowledge gap between school leaders and students is a major limitation on educational innovation. Phase 1 of the model directly addresses the technology expertise of school leaders not only by providing training with gadgets and technology tools, but also by providing high quality professional development on how integration of technology into instruction has been shown to increase student engagement and learning. Professional development provided to school leaders during Phase 1 shapes their ability to create a school culture that can enact a timely response to educational innovations and provides them with coaching to lead schools in adopting new and proven teaching and learning methods. During Phase 1 school leaders also research the technology culture in their school or district and complete a technology leadership action plan.

Phase 2 then seeks to build on the action plan developed in Phase 1 by building leadership teams around the school leader. In Phase 2, scholars and practitioners engage with whole-schools to make the case for technology integration, to increase technology knowledge and to assist whole-schools in building technology implementation plans for their school. During this phase, the school leader and the leadership team select one of the innovation labs with which to partner in the implementation of innovative practices in their school or district.



Phase 3 represents the implementation of innovation at scale across schools and districts. Working closely with one of the issue-based innovation labs, schools implement innovation action plans developed in the previous phases. To assist these schools and leaders, members of the issue-based innovation labs provide on-site professional development on a near monthly basis, in addition to the technology supported interactions between these monthly on-site meetings with school personnel. Thus, the issue-based innovation labs will not only be independently identifying and researching potential educational improvements, but will also be capable of immediately disseminating that research to test the efficacy in existing schools.

The fourth phase directly addresses the learning needs of students. In this phase the resources of the University really shine. Working with computer scientists at UK, for instance, the P20 Innovation Lab will develop educational games that support common core standards. Also, university scientists, engineers, medical professionals, artists and others will translate university learning applications into learning applications for students. Not only does this make learning more engaging for P12 students, but it also

serves as a transition to college and career readiness because of the more direct relationships with universities earlier in their educational careers.

Finally, Phase 5 completes the circle by providing scholarships to students in P20 schools that have completed the previous phases. Through funding developed by the University of Kentucky, P20 Scholars will enter the university on scholarship in exchange for the responsibility to return the knowledge gained at the University to the schools from which they came. This knowledge exchange thus sustains the innovation circle by encouraging a generation of students to take personal responsibility for giving-back and improving Kentucky's schools.

When schools reach Phase 5, their relationships with the P20 Innovation Lab are not finished. Schools can work with the P20 labs to continue to implement existing innovations or engage in new innovations. While this is the first initiative to be implemented, many more will follow and schools will have nearly limitless opportunities to engage in new types of educational innovation.

Sustainability & Scalability

The Kentucky P20 Innovation Lab is both a sustainable and a scalable model. It heavily utilizes existing educational resources for primary funding, but also will produce a steady stream of research grants because of the close partnerships created by the lab structures and the ongoing research activities. The primary existing revenue source for P20 Innovation Lab funding is local professional development budgets. However, working with our partners at the Kentucky Department of Education, new revenue sources to fund innovation are rapidly under development. For instance, school improvement budgets, Race to the Top funds, technology funds, and others may all be applicable components of the P20 Innovation Lab structure. In addition to the already sustainable funding model, the University is aggressively pursuing donations to supplement or possibly supplant costs to districts. The College of Education at the University of Kentucky is also actively pursuing systemic changes to make this type of innovation-oriented engagement with schools the norm rather than the exception. Working within the lab structure, the teaching, research and service of university personnel will increasingly target Kentucky-based innovations that the scholars can then report to the world through existing and new publication outlets.

In addition to the capacity to sustain the innovations, the P20 Innovation Lab structure also can take the innovations to scale rapidly. Once innovations are found to be effective, those innovations can be implemented immediately in the following cohort in the 5 Phase Model, quickly generating a larger sample on which to test the effectiveness of the innovations. In this way, innovations can grow exponentially. Further, as other universities partner to deliver similar innovation models within their regions of the state, additional schools can enter the P20 Innovation Lab framework. Partnering with P20 Lab central staff based at the University of Kentucky, regional universities can implement and grow their own innovations and labs within their region, but still be in regular contact and communication with other similar efforts in far distant regions of the state. In this way, even regional innovations can scale quickly. Further, working with Kentucky Department of Education officials, other state staff, and

educational cooperatives, innovations that have been found to be effective at scale in a representative sample can be further encouraged through policy changes. Given the deep, developing partnerships across the state mentioned earlier across all agencies, Kentucky seems especially well-positioned to sustain and scale innovation.

P20 Partners:

The P20 Innovation Lab is actively pursuing partnerships with educational entities across the entire P20 spectrum, both across the Commonwealth and across the globe. In addition to partnerships across the University of Kentucky and with our friends in Oklahoma, the following is a representative list of state agencies, educational cooperatives, educational institutions, non-profit groups and academic organizations with which the Kentucky P20 Innovation Lab has already established relationships:

- Central Kentucky Educational Cooperative (CKEC)
- Central Kentucky Special Education Cooperative (CKSEC)
- Educational Leadership Development Collaborative (ELDC)
- Fayette County Public Schools
- Kentucky Association of Colleges for Teacher Education (KACTE)
- Kentucky Community and Technical College System (KCTCS)
- Kentucky Council on Postsecondary Education (CPE)
- Kentucky Department of Education (KDE)
- Kentucky Education Professional Standards Board (EPSB)
- Kentucky Office of AdvancED/Southern Association of Colleges and Schools (AdvancED/SACS Kentucky)
- Kentucky Office of Vocational Rehabilitation
- Prichard Committee
- University Council for Educational Administration - Center for the Advanced Study of Technology Leadership in Education (CASTLE)

Contact

The Kentucky P20 Innovation Lab welcomes your inquiries. We realize this is a different, and in itself innovative, model of state-university-district partnership. If you are interested in learning more about how the Innovation Lab structure operates, please let us know. If you are interested in participating in one of the issue-based innovation labs, we want to hear from you. If you are a school leader and are interested in participating in the 5 Phase Model, we want to come and tell you about it. We are rapidly gearing up to launch this initiative in Summer 2010, so let us know if you are interested and we will send you more information as it develops. Please find the contact information below:

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