

THE INSTITUTE OF APPLIED CREATIVITY & COMMUNITY TRANSFORMATION (ACCT) AT MODESTO JUNIOR COLLEGE

BACKGROUND: A PLACE TO GROW IDEAS IN CALIFORNIA'S CENTRAL VALLEY

As residents of California's great <u>Central Valley</u>—a mountain-walled plain some 400 miles long and 75 miles wide, covering almost 15 million acres—we all understand that our communities, our families and our daily lives owe much to the fact that we inhabit "the richest farming region in the history of the world" [1]. Brown loam with a subsoil of clay and substratum of indurated duripan, our fertile soil is famous for supporting a vast array of bountiful crops and some of the most important agro-industrial activities on the planet. Moreover, the cultural heritage of our region, a "rigorously heterogeneous society," is made possible by a continual stream of "refugees, immigrants, migrant farm laborers, (and) low income workers from all over the world," who come to work the land and seek the American Dream [2,3]. In our valley, Anglo, Hispanic, Italian and Portuguese families co-exist with Chinese, Basque, Sikh, Swede, Assyrian, Armenians, Russians, Liberians, Hmong, Laotian and Wintun, Maidu, Miwok and Yokuts indigenous groups, among others, who rely upon our rich soil to grow crops, families, businesses and communities. But where do we go in the Central Valley to grow rich, diverse ideas?

This is the purpose of the <u>Institute of Applied Creativity and Community Transformation</u> (<u>ACCT</u>) at Modesto Junior College. The project calls for a unique academic institute dedicated to interdisciplinary inquiry and meaningful, <u>affective learning</u> so as to provide collaborative, experiential learning opportunities for our students and to foster innovative solutions to local issues identified through community-based research.

The ACCT Institute will coordinate and support cooperative, problem-based teaching and learning that will, in turn, strengthen the interdisciplinary nature of our Pathways schools. Various programs at our college will work together, across traditional academic knowledge systems, to structure genuine, project-based course materials which ask students to apply critical thinking skills to identify, research and propose solutions to important issues in California's Central Valley. The ACCT Institute will take particular concern to seek innovative solutions which can be addressed through collaboration amongst various natural, applied and social sciences programs, engineering and technology programs, entrepreneurial and liberal arts fields.

Ample research exists to show how cognitive diversity promotes creative thinking and the institute will focus on relational, cross-disciplinary projects and sharing of best-practices in teaching and learning which foster projects and assignments among courses and schools that ask students to relate one academic area of study to others. This <u>interdisciplinary</u> Institute focuses on the potentials of community transformation through creative innovation.

As such, the ACCT Institute will provide students a rich, <u>experiential</u> undergraduate education and will help to grow ideas from the early stages of community investigation and inquiry, through a variety of requisite academic skills and, ultimately, to proposing, designing, patenting and marketing innovative solutions to issues which have the potential to <u>transform</u> the Central Valley.

The Institute's experiential, applied and <u>relational</u> learning focus together with its dedication to interdisciplinary teaching and learning will also provide the opportunity for college faculty to cooperate with a wide-variety of actors in our community, particularly those who work with our world famous <u>San Joaquin Valley Soil</u> and those who have recently migrated to the Central Valley.

There is a strong equity component to the ACCT Institute as it fosters community-based, experiential opportunities that incorporate diverse groups that have been typically omitted from academic studies and representations of local cultural identity, including immigrants, ethnic minorities and families new to higher education. These populations will be especially encouraged components of the work in the ACCT Institute at MJC because it is precisely these "newer" populations that gravitate towards entrepreneurship and innovation.

According to studies by *Forbes*, the *Harvard Business Review* and others, recent migrants to the United States are twice as likely as native-born residents to start their own businesses and participate in some of the more innovative sectors of our economy (see: <u>Immigrants Twice as Likely To Start New Business</u>; <u>Immigrants More Entrepreneurial</u>; <u>Immigrants Natural Entrepreneurs</u> and <u>Venture Capital and Entrepreneurship</u>).

The Institute of Applied Creativity and Community Transformation is an <u>integrative place</u> for students to hone academic skills in an experiential framework, and an opportunity for students, faculty and college and community leaders to seek innovation, grow new ideas and cultivate more effective approaches to teaching and learning. The ACCT Institute, therefore, hopes to become an interactive, cooperative organization that is as rich as our soil and as dynamic and diverse as our Central Valley communities.

STRUCTURE

The ACCT model combines three critical elements of teaching and learning:

- · contextualized, interdisciplinary, project-based programs,
- · professional development, focused on the scholarship of teaching and learning,
- · active, community engagement, including entrepreneurship, service learning, social justice and other issues relating to the amelioration of our local communities.

Each of the three central elements are outlined in the table below, including ideas for a support structure.

On-Campus Programs	Professional Development	Community Presence
Interdisciplinary, project-based programs that incorporate active, contextualized GE course materials, including, community engagement, and service learning	Focus on instructional design that explores new pedagogies and collaborative learning based on the latest in scholarship	Entrepreneurship evening discussions with local start-up leaders and students, including TechStars Start-Up Weekend (mentoring for idea-to-proposal intensive workshop)
Maker space(s) for invention education and solution development	Small group communities of practice which explore interdisciplinary program redesign – (may include reassigned time for faculty for intensive collaboration)	Community meetings to develop service learning opportunities and ideas for community issues to explore through scholastic inquiry and
Programs to foster inquiry education, including project and discussion-based learning	Development of service	creativity
Program labs for focused, applied learning	learning courses/modules for program/school students	College courses offered in the community, including new spaces such as detention facilities, nursing homes and through dual-credit agreements

General Support Structure			
Lab Technician for Maker Space	Oversight by dean/VP with administrative support	Coordination by dean/VP with administrative support	
Student fellows Oversight by dean/VP with administrative support	PDCC coordination with input from the faculty professional development committee and the MJC Academic Senate	Career Services coordinates development of service learning opportunities to forward to program/school faculty	
Maker Space(s) funded through Strong Workforce or other grant sources	Institutional PD priorities developed through College participatory governance structure	Instructors teach courses at site or community locations	
	Coordination of funds through current categorical budgets	Computer access to MJC services	
		Program Specialist on-site 4 hours/day	

INTELLECTUAL RATIONALE: WHY MODESTO JUNIOR COLLEGE NEEDS A COLLABORATIVE 'ONE-ROOM,' INTERDISCIPLINARY APPROACH

The institute relies upon an idea about education as old as the United States itself. In the nascent days of the American Republic, a pressing concern for the founders was the establishment of a public school system. Thomas Jefferson—driven by a fear that even the best forms of government "in time, and by slow operations" become "perverted" into "tyranny"—pressed for a free, public education system in order to assure a knowledgeable citizenry. In his all-important <u>Bill for the More General Diffusion of Knowledge</u> (1779), Jefferson writes of the twofold intent of public education: (1) the development within every citizen of a historical awareness of the continual struggle against tyranny, and (2) the training of future leaders with a liberal arts education so that all free people can receive and guard the "sacred deposit" of "rights and liberties."

In order to accomplish this dual purpose, Jefferson advocated for a local, one-room school house in each neighborhood or community bolstered by a post-secondary system. Thus, he foresaw a nation peppered with free, community-based education centers which transcend both age and experience (the system was multiple grade-level and open access) and that eschew discrete academic disciplines in favor of a general, holistic approach meant to sustain communities with a continual supply of educated, thoughtful citizens.

What has happened since those nascent days of republic? In short, our education system has continually moved towards a segmental approach which has reinforced social inequalities and relied upon increasing specialization "by means of acquisition of the organized bodies of information and prepared forms of skill which comprehend the material of instruction," as John Dewey argued in Experience and Education (1938). We have moved from a common space for a diversity of ages, backgrounds and experiences to pursue shared knowledge to discrete knowledge systems which differentiate by birth date, academic disciplines and, often, socio-economic and ethnic or racial status [4].

What are the consequences of our shift away from Jefferson's original intent for the public educational system? Often contemporary public education students are left underprepared for adulthood, inexperienced in working with others of different ages and backgrounds and isolated in discrete academic silos, having never considered the larger goals of interdisciplinary inquiry, community engagement or the rights and responsibilities of citizenship. One long-term consequence of our myopic drift from our founding vision is that public organizations, colleges and universities have often continued to deepen the divide, creating more specialized silos of learning and less cross-disciplinary teaching and learning, less emphasis on communities of inquiry, collaborative innovation and "real world" problem solving.

In fact, some have squarely placed blame on the organization of learning into certain knowledge communities itself. In 1959 C.P. Snow gave a polemical Rede Lecture at Cambridge University, claiming that academia had evolved into "two cultures"—the sciences on one hand and the humanities on the other—and that these two isolated academic pursuits are physically separated on campuses and rhetorically and methodologically even further apart. Snow went on to suggest that this "divide" between science and the humanities was a major hindrance to thinking about solutions to the world's problems.

The Institute for Applied Creativity and Community Transformation posits that Jefferson, Dewey and Snow were all right to suggest that multi-generational, community based and interdisciplinary learning communities are the ideal and that learning environments which do not address teaching holistically and do not seek <u>educational inclusivity</u> are not serving

students as they should. Just one symptom of this narrowing of American students to information learning while neglecting critical thinking is that our students do not perform well on international <u>scientific</u> and <u>cultural</u> literacy assessments.

We seem to have lost the initial purpose of the public Institute system--to grow new ideas, then act upon them and better ourselves and our communities. The ACCT Institute will not only seek new ideas and innovation by collaborating with the community on a wide-variety of disciplines, but also seeks to help shape future disciplines, certificates and areas of study at MJC. <u>Professor Menand of CUNY</u> reminds us in "The Marketplace of Ideas" that:

"In trying to imagine the future of disciplinarity, it is worth remembering that the disciplines are not actually very old themselves. Most of them came into being between 1880 and 1910, when larger, more holistic organizations, such as the American Social Science Association and the American Association for the Advancement of Science, broke up into smaller and more specialized professional associations, such as the Modern Language Association, the American Historical Association, and so forth. It was during this period, around the turn of the century, that the department first established itself as the basic unit of academic organization. When we talk about "the disciplines," then, we are talking about a bureaucratic arrangement whose history is not very long."

Thus, if the organization of our academic disciplines is a continual process of adaptation to intellectual as well as social, economic and political forces, <u>Billy Frye</u>, Chancellor of Emory University, reminded us (1999) that what should ideally be driving our conversations about academic organization on college and university campuses is: "the need to communicate, recognizing that we all have something important to say to and to learn from our colleagues; the need to focus on the big issues and to avoid entrapment in intellectual fashions, disciplinary turf wars, and cults of personality; and the need to meet the needs of our students and of society at large more effectively."

After all, the problems of the future we are preparing our students for are complex and transcend specific academic knowledge communities. Students of today will face a myriad of new challenges—ocean acidification, rising temperatures and seas, permafrost and coral reef decline and the extinction of an unprecedented number of species all come with other worries about a new automated, A.I.-driven economy and the massive loss of working class jobs, the rise of China and India and the paralysis of our own political system into inaction and reactivity.

If students are simply prepared to look at learning as a mastery of discrete information in an academic silo (pursuing the memorization of data and facts that can be readily accessed by all online) and only pursue <u>specialization</u>, what are the <u>skills</u> they are missing in their education to help prepare them for complex problems?

Finally, the ACCT Institute will foment the idea of moving away from being content experts, to becoming learning facilitators who are always modeling life-long learning. Dewey argues for this facilitation approach by suggesting that to not so offers students experiences that are too "disconnected from one another that, while each is agreeable or even exciting in itself, they are not linked cumulatively to one another. Energy is then dissipated and a person becomes scatter-brained" and their "disconnectedness may artificially generate dispersive, disintegrated, centrifugal habits." The "principle of continuity of experience means that every experience both takes up something from those which have gone before and modifies in some way the quality of those which come after." In short, our educational institutions often are plagued by the fact that in many cases we seem to have forgotten how to learn from one another in any transformative, meaningful way.

HOW DOES THE ACCT INSTITUTE FIT IN WITH OUR COLLEGE PRIORITIES AND ADMINISTRATIVE APPARATUS AND WHAT ARE ITS PRINCIPLE ATTRIBUTES?

The *State Chancellor's Office Goals for 2022* include reducing equity gaps "among traditionally underrepresented student groups, with the goal of cutting achievement gaps by 40 percent within 5 years and fully closing those achievement gaps within 10 years." There is both research and a previous project at MJC (*NEH Common Ground Cohort*) which supports the idea that community-based and experiential learning can reduce equity gap drastically. Simply put, those activities which encourage "active doing" instead of the "passive and temporary acquisition of information" are more accessible to all learners as they play to a student's strengths instead of accentuating academic deficiencies.

In fact, MJC's recent *Common Ground Cohort (NEH)* grant was able to reduce the equity gap from 40.8% to 7.7% over two years in pilot classes in the liberal arts as a result of its curricular innovations in community-based, experiential learning modules. This mini-grant hopes to extend these results across divisions and inculcate new, systemic approaches to encourage experiential and community-based learning models.

The project also aligns with our Educational Master Plan (EMP) at MJC in several ways. For one, the first priority of our EMP is "academic excellence in teaching and learning" and a commitment to "intentional, well-communicated pedagogy, curriculum."

This project will explore a wide-variety of best practices proven to increase student success and retention (Workshops #1-3). The fourth priority of our EMP is the institutionalization of "evidence-based assessment, refinement, and sustainable practices."

One of the unique wrinkles of this project is bringing together faculty leaders to build new consensus and desire for action related to the improvement of teaching and learning and the use of data and scholarship to better "know" our students and encourage success.

This interdisciplinary Institute is a learning community that helps assure that the schools in MJC's new Guided Pathways Model work together in an interdisciplinary fashion on curricular, community and teaching and learning projects.

Interdisciplinary faculty come into the ACCT Institute for a specific period of time for focused professional development and even work collaboratively to redesign programs that contextualize general education. These faculty then return to their original schools with newly developed community and project-based learning curriculum and a new cohort of interdisciplinary faculty come in for the subsequent cycle of developmental innovation.

In one sense, the Institute becomes an important community research and development arm of the College. The Institute is intended to assure that student learning is integrated, active, affective, collaborative and creative.

The Institute will leverage extant technologies to encourage collaboration. Virtual and asynchronous opportunities for exchange will be employed in addition to face-to-face learning encounters and community-based service and project-based learning experiences are offered. The Institute will also archive materials from events for future use by faculty, staff, administrator and student.

Curricular projects which involve multiple Pathways Schools in the creation of new, integrated lesson plans, curricular models or class alignments will be especially encouraged. The Institute hopes to not only foster cross-disciplinary curricular and programmatic cooperation among the other Pathways schools but also to bring in a variety of experts, scholars and scientists to foster further engagement.

Finally, the Institute takes the community orientation of its interdisciplinary curricular and co-curricular projects seriously. As faculty foster and further encourage problem solving, active learning and project-based learning in the classroom, the Institute will leverage community support to assure that students and faculty are also utilizing the community as a teaching and learning resource.

INTERDISCIPLINARY PEDAGOGIC TRANSFORMATION: RESEARCH, CONTEXTUALIZED EDUCATION and PROJECT-BASED COLLABORATION

There is a growing body of scholarship suggesting that instructors who encourage "active-doing" instead of passive (and usually temporary) acquisition of information are more effective and the learning is more profound. While discussion-based learning reaches back to the ancient Greek academy, recent neuroscientific research also seems to confirm what we've known for a long time, to develop the higher-learning skills — analysis, synthesis, evaluation and creation — students need more time for conversation and other forms of experiential learning in order to master a skill, knowledge system or performance indicator.

The benefits of experiential learning are especially important to the success of disproportionately impacted student populations, therefore, this series focuses on theories and praxis which have been proven, in some way, to increase student success and promote equitable classroom learning.

The ACCT Institute will organize and coordinate, annually, communities of practice of 5-10 faculty from a variety of schools across the college. Each cohort will center around a chosen anchor program (a program major, Agriculture is used as an example subsequently) to contextualize general education. The cohort will create:

<u>Interdisciplinary faculty development with community focus and student engagement</u>

3-4 interdisciplinary courses bound in 9- or 12-unit bundles (e.g., Ag Mechanics, English, & Sociology; Entrepreneurship, History, Statistics, Speech) with GE courses contextualized for schools/program majors.

I: Cornerstone: Exploratory Program Curriculum which includes research into community-based issues and college skills which may include fundamental content in First Time in College (FTIC) course.

II: Problem Identification and Collaborative, Interdisciplinary Problem Solving which allows the faculty-student cohort to consider the identified community issue(s) from multiple academic disciplines and epistemological approaches and begin to consider potential solutions that includes creative collaboration among the natural and applied sciences, liberal arts and career and technical education fields.

III: Capstone: Program Solution and Entrepreneurial Curriculum which fosters solution development, the building and patenting of prototypes, community engagement and dissemination. With program-focused faculty as team leads, the interdisciplinary faculty team helps students to develop contextualized and creative solutions to complex problems in our community.

All curriculum is delivered as integrated curriculum, graded and assessed as separate courses by discipline appropriate faculty. Students potentially earn 27 – 36 units in 3 semesters, including 9+ program units and 18+ General Education (GE). Characteristics of the course bundles include an interdisciplinary cornerstone course to identify the community problem (social justice), a midway sequence of courses to provide discrete STEAM and related knowledge in the context of problem solving and a capstone dissemination course. The focus of each ACCT community of practice includes:

- Community-focused service learning and team-based, creative solution development
- An exploration of industry, non-profit and transfer organizations in the community with potential global partnerships
- Identification and understanding of community needs and beneficiaries which includes development of a community "problem bank"
- Partnerships with K-12 teachers (community college/high school partnerships, feeder schools) with MJC students as mentors; dual credit/Early College potentials with local school districts
 - Service-learning opportunities and internships in the community
- Policy, research and related applications in political science, patent research, etc. as well as readily identifiable skill sets (soft and technical) for student career development. Team-based, creative solution development
- Group ideation; "invent teams;" problem identification with ethnographic practices; Student team roles in projects may include: Administration, Finance, Technical, Communications,

 Sustainability
- Beneficiary interviews (social sciences), creative thinking, communication skills and applied creativity to projects in which students are continually reminded of their "why?" while discrete skill sets are infused through project-based learning model; contextualized learning model
 - Cooperative learning (integrative studies) which address a student's habitat, leisure and work in the Central Valley (cure it, eat it, move it, use it); rapid prototyping (cardboard and tape, low cost); midway showcase to community and beneficiaries for feedback and support (communications)
- Community outreach funding (entrepreneurship); legislators and local political figures involved in support and dissemination; local industry as funding support and community leaders as judges
- Focus on higher level thinking skills such as application, evaluation, synthesis and creativity
 Preliminary patent application and/or grant proposal(s) (technical and professional
- writing) with USPO (U.S. Patent Office) support; advertising, marketing, commercialization, license and related product development potentials; encourages faculty to ask "how we support inventiveness and transformative change"

ACADEMIC INQUIRY IN OUR COMMUNITY: AGRICULTURE AS AN EXAMPLE OF INTERDISCIPLINARY, PROJECT-BASED TEACHING, LEARNING AND LOCAL ACTION

The ACCT Institute is an example of **contextualized, inquiry-based education** that is based on **inventing solutions to address an identified problem in the community.** One obvious area of focus is agriculture, a crucial part of our local communities we serve. In fact, the *annual* value of agricultural production in California "exceeds the total value of all the gold mined in the Golden State since 1848."[4] The Institute will ask students, professors, community leaders, local businesses and residents to come together to identify complex issues in agriculture that have potential solutions which involve innovation, entrepreneurship and the natural and applied sciences as well as the arts, design and our rich cultural heritage. There are a variety of crucial, transdisciplinary issues related to agriculture to be explored, such as:

- i) the integration of robotic machinery, drones, Artificial Intelligence (AI) and other technological advances to agriculture in the Central Valley and its social, cultural and economic implications;
- ii) climate changes and crop production challenges in the 21st century as well as the effects of the climate crisis on agricultural, economic and social identities and activities in the Central Valley;
- iii) the globalization of agriculture and how the Central Valley can best be positioned as a chief supplier for the growing yet somewhat unstable global market for agricultural commodities, focus on developing economies, regional and block trade agreements and the implications of climate and world population growth;
- iv) the interface of the public sector with small and industrial-scale agricultural activity, including new government mandates, regulations and policies as well as the impact of various trade policies and pacts on the supply and demand for local agricultural commodities in a global marketplace;
- v) the impact of biological technology advances on the agriculture sector, including the production of biofuels, the practice of gene editing crops and the economic, social and cultural implications of biotech crops;
- vi) changes in technology, agricultural practice and how these changes affect those working in the agricultural sector. Exploration of the larger cultural matrix affected by technological advances in agro-industry as well as the links between agricultural activity, food, cultural identity and a sense of purpose in life.

Additional sources for considering the many interdisciplinary, complex-system issues facing agriculture in the near future include: Food and Agriculture Organization of the United Nations Rome, 2017; Reaping What We Sow How the Practices of Industrial Agriculture Put Our Health and Environment at Risk; Agriculture and Food News; USDA World Agriculture Production

A TEACHING AND LEARNING CENTER

An important aspect of the ACCT Institute's emphasis on contextualized, inquiry-based education is identifying and addressing problems in our community, and for this reason the ACCT Institute programming must make greater efforts to be visible in the community itself. This should be part of the purpose of a proposed teaching and learning center that may take many forms (i.e., multi-purpose, a shared public-private community center, classroom and exhibition space, an invention lab *etc.*).

The idea of physically closing the gap between disciplines in a centralized location seems crucial. Many learning institutions have scholarly distance between disciplines, but we at MJC also have two campuses, which creates even an additional geographical distance. Having a central venue dedicated to the sharing of ideas between faculty, classified professionals, educational leaders, students and the community seems crucial. There is some potential to share a space with other education partners and/or other community partners and local businesses.

POTENTIAL PARTNERSHIPS

The following organizations are among the potential partnerships with MJC's ACCT Institute:

Massachusetts Institute of Technology (MIT) and the LEMELSON FOUNDATION

EurekaFest is a competitive program for high schools and colleges around the country framed in an invention education model. Teams of 5 – 10 students identify a community problem, design a solution, build a prototype, gather community funding to build the invention, and present the final product to multiple audiences (legislators, beneficiaries, community members, etc.). Along the way, they research existing patents and often apply for a preliminary patent for their invention. They also develop essential soft skills and professional experience that bolsters their career trajectories. The Lemelson Foundation and MIT want to expand this program to community colleges. The timing of the recently funded Strong Workforce Engineering program was very exciting to the MIT folks and they have invited us to send a team to their three-day teacher training at the end of July to learn about designing applied engineering programming, interdisciplinary inquiry and participate in developmental discussions.

See: https://www.lemelson.org/about-us and https://lemelson.mit.edu/events/invention-education-summer-workshop-massachusetts and https://lemelson.mit.edu/events/eurekafest-2019

INTERDISCIPLINARY PARTNERS

Modesto Junior College (MJC) used an NEH grant to integrate the local history and culture of California's Central Valley into its humanities curriculum, with a focus on the migrant, refugee, and low-income communities from which many of the college's students hail. Over the **Common Ground Cohort** developed and tested 27 instructional modules that have been shared across the region and are now being used in classrooms. The new curriculum has drastically improved student outcomes and the teaching culture at MJC, as well as fostered new partnerships among the region's universities, colleges, and businesses.

For 70 years, the **Great Books Foundation** has helped people of all ages think critically, listen closely, and consider contrasting ideas with civil discourse. They use a Shared Inquiry™ methodology empowers participants and fosters effective and responsive leadership that is inclusive of all stakeholder voices. With Inquiry In Action, they are building stronger, more innovative working and thinking communities to equip leaders with the skills to generate positive change.

Cal Humanities is an independent nonprofit organization and a partner of the National Endowment for the Humanities. Since 1975, they produce, fund, create, and support humanities-based projects and programs, eye-opening cultural experiences and meaningful conversations. For more than 40 years, California Humanities has awarded over \$30 million in grants across the state, reaching every Congressional district.

The **National Endowment for the Humanities (NEH)** is an independent federal agency created in 1965. It is one of the largest funders of humanities programs in the United States. Because democracy demands wisdom, NEH serves and strengthens our republic by promoting excellence in the humanities and conveying the lessons of history to all Americans. NEH grants typically go to cultural institutions, such as museums, archives, libraries, colleges, universities, public television, and radio stations, and to individual scholars.

The **Andrew W. Mellon Foundation** seeks to strengthen, promote, and defend the centrality of the humanities and the arts to human flourishing and to the "well-being" of diverse, fair, and democratic societies. To this end, their core programs support exemplary and inspiring institutions of higher education and culture.

See: https://nehforall.org/projects/the-search-for-common-ground-culture-in-california-s-central-valley and https://www.greatbooks.org/inquiry-in-action/ and https://calhum.org/ and https://www.neh.gov/ and https://mellon.org/

The University of Dayton's Applied Creativity for Transformation Program (IACT)

IACT is home to the nation's first undergraduate certificate in Applied Creativity for Transformation. Open to undergraduate students of any major, the certificate is a first step in achieving the University of Dayton's vision of innovation, applied creativity, entrepreneurship and community engagement. Curriculum introduces students to the

creative competencies that today's job market demands, — critical perspective, complex problem solving and collaboration with others — while applying those same skills to the students' diverse disciplines of study.

See: https://www.udayton.edu/iact/academics/certificate.php

NEXTFLEX

Formed in 2015 through a cooperative agreement between the US Department of Defense (DoD) and FlexTech Alliance; NextFlex is a consortium of companies, academic institutions, non-profits and state, local and federal governments with a shared goal of advancing U.S. Manufacturing of FHE.

See:https://www.nextflex.us/news-events/news/spring-semester-2019-flexfactor-finals/https://www.nextflex.us/news-events/events/innovation-day/

TECHSTARS

An entrepreneurial acceleration company, Techstars would offer a 3-day, intensive event (15-hour days for participants – maybe a small entrance fee). The invention education event would include students and community members. Participants form teams, based on the ideas and develop them into a pitch over the next 3 days; TechStars provides a facilitator and several mentors who help teams develop their ideas.

See: https://www.techstars.com/

[2] Ibid, 13. "Society here might be divided arbitrarily into five classes: the nonresident rich, corporate owners and executives; the resident rich, a group that includes family farmers, corporate managers, and successful professionals, along with those working in firms that serve agribusiness; a complicated and increasingly multiethnic middle class that includes many owners of small farms, many professionals, as well as those wearing both blue and white collars and providing services to the wealthy and impecunious alike; the upwardly mobile poor, some of them small farmers too, but most providing blue-collar work and frequently in the process of escaping the cycle of migrant labor; and finally, a considerable underclass composed in large measure of recent arrivals, along with those who have never managed to escape poverty's grip," Ibid. 214.

[3] Fujimoto, Isao. Dynamic Mosaic: California Central Valley Partnership's Collaborative Multiethnic Approach to Organizing Immigrant Communities. Cornell University Doctoral Dissertation, February 2010. Also see: Johnson, Stephen, Gerald Haslam and Robert Dawson. The Great Central Valley: California's Heartland. Berkeley: U of C Press, 1993, 11.

[4] There are periods of time in the 20th century in which this system has managed to be more inclusive, particularly in higher education. The halcyon days of early post-WWII America, for example, papered over the flaws of this differentiated, disciplinary approach with an influx of students and funding. Fueled by the G.I. Bill and Cold War public funding increases—the United States witnessed 500% growth in undergraduates and a 900% increase in graduate students. Professor Louis Menand (CUNY) in his article "The Marketplace of Ideas" (2001) has suggested that "between 1965 and 1972, new community college campuses were opening in the United States at the rate of one every week." But today in the post-secondary environment, we are faced with cyclical recession and a leveling off of the college-age population. We are also experiencing a radical diversification of the student population in terms of gender, ethnicity and socioeconomic status.

^[1] Gerald Haslam. The Other California: The Great Central Valley in Life and Letters. Reno: U of Nevada P, 1994, 3.