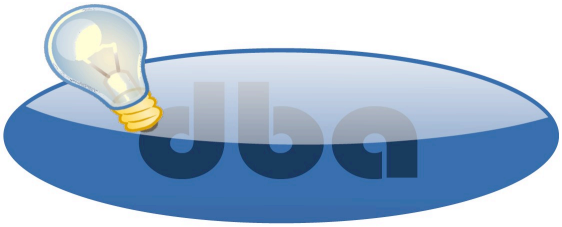


Lincoln Trail Dynamic Business Accelerator

Focused Education

The Information Technology Education Model

Focused Education

This component defines the specific implementation of the Dynamic Business Accelerator to respond to the educational requirements for the LTADD. The focus is information technology and facilitates other industries that relate to BRAC or WIRED 65 initiatives. This focus can be adjusted to meet requirements in other geographic areas with concentrations in appropriate industries. This demonstrates the flexibility to replicate this model in other geographic and task related areas.

We can assure the availability of employable personnel through a deliberate educational process. It is acknowledged that the Ft. Knox based Human Resources Command will require a continuing pool of IT knowledgeable resource. Granted; the region cannot initially supply an adequate supply of personnel but this demand will continue due to retirements, relocations, advancements to other locations and other conditions. Working closely with the Human Resource Command at Ft. Knox to identify their current and future requirements, a relevant and focused course of study has been developed to assure an educated supply of local candidates. Other areas within Wired65 may require different disciplines to address their growth demands, therefore this component is readily transportable, scalable, and affordable.

Lincoln Trail Applied Education Accelerator Model

Utilizing available technology, an equipped classroom with a post-secondary institution arrangement can deliver an Interactive Remote Instructor course of study comparable to the traditional on-campus regimen. Education will transcend the barriers of physical distance. A representative example of this approach, using WKU as the provider, is the proposed Interactive Remote Instructor Education (IRIE) that is well tested and described below:

Interactive Remote Instructor Education - WKU IRIE

IRIE is a training solution that blends traditional classroom instruction, with state of the art remote classroom technology and a corroborating, Focused Education Internet site. Classes via IRIE are live, hands-on, and entirely instructor-led within a traditional classroom atmosphere. The curriculum and the instructors teaching the classes are exactly the same as the WKU campus training. The difference is that students receive all the benefits of a traditional training class from the convenience of a local classroom facility.

Students Can:

- View the Instructor’s presentation and demonstrations.
- Listen and participate interactively.
- Get immediate assistance from the instructor.
- Perform all labs.
- Review physical copies of course material.

Functionality:

- All course materials are provided at the local classroom and the Focused Education Internet site.
- Students have dedicated PCs assigned to them pre-loaded with all course content.
- Students connect their dedicated PCs via the WKU standard Internet connection.
- All students interact with the instructors and ask questions at anytime.
- Students view the remote instructors via an interactive mode for presentations and demonstrations.
- The instructor can view and respond to students at any time to aid in labs and offer assistance.
- All testing requirements are provided locally in real time mode.

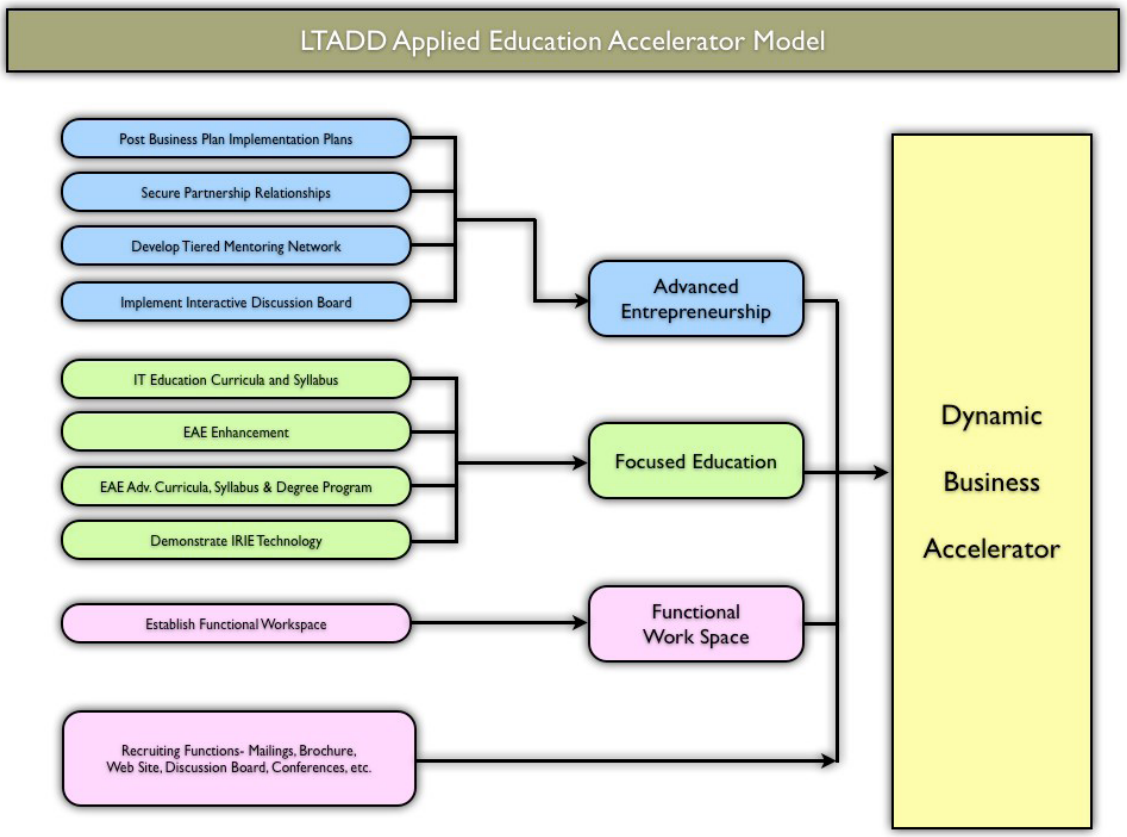
IRIE Overview:

This unique approach leverages interactive technologies to provide the full classroom experience to any remote classroom location. Training is delivered in the standard instructor-campus training format. Students see and hear the instructor's lecture with all presentations, demonstrations and whiteboard work, as well as perform lab activities via the audio-visual facilities. Students communicate with the instructor, the classroom proctor and other students as in a typical campus classroom. The instructor communicates with the class and individual students and their computer in a real time mode.

The Student Experience:

- The same familiarity of instructor-led classroom-facilitated training.
- The instructor's presentation, desktop, demonstrations, and whiteboard works just like it would for a campus student.
- Full conversational capabilities with the instructor and other students attending the class.
- Labs are conducted during the class time with the required assistance from the instructor.
- The total class size is limited to the same number of students as the normal instructor-led classroom, and classes may have both local and remote students in attendance.
- The instructor can monitor student progress and provide assistance when needed.
- Students receive all course-required materials.
- Students receive accreditation via the participating institution.

In concert within the IRIE, the availability of a dedicated Focused Education Internet site supports the curricula developed for each participating area within the LTADD to deliver a relevant and focused course of study. This site provides introductory material by course, suggested study topics, course objective examples, links to relevant course related sites, and content as directed by the selected post-secondary institution. As an integral component of the LTADD Applied Education Accelerator Model, IRIE is quickly transportable to any location with requisite technology, classroom facility and equipment. The IRIE academic provider can be any post-secondary institution with the technology to interactively support the local classroom. IRIE is scalable, sustainable and significantly reduces the direct educational costs. A product of this effort is a demonstrable IRIE classroom.



Information Technology Education Model

The Information Technology (IT) Education Model was developed to illustrate how a business accelerator can select an industry sector and prepare an educational pipeline that can be used effectively by accelerator clients. For this deliverable, we made arrangements with the WKU Systems Management division to arrange for a customized curricula and educational path for clients. The WKU Systems Management program leads to a bachelor's degree with 44 hours in general education, 24 hours in systems management, 9 hours of department electives, 28 hours in elective or transfer courses (or minor) and 15 hours in a professional concentration. *It was designed specifically to prepare graduates with organizational, managerial, and technological skills*.

This program was selected for its unique flexibility which includes the ability to take all classes online, no pre-defined start or end dates, and its wide array of relevant professional concentration areas. It provides multiple access points for learning. These concentration areas include:

- Administration
- Criminology Systems
- Digital Media Systems
- Geographic Information Systems
- Government Systems
- Health Care Systems
- Human Resources Development
- Industrial/Manufacturing Systems
- Information Systems
- Leadership
- Military Systems (Civilian)
- Occupational Safety & Health
- Technical Sales
- Technical Training
- Technical Writing

Certification Program:

While the accelerator would always encourage clients to complete or pursue formal degrees, the DBA has arranged with WKU to define a unique certification program, which can be used to establish credentials for accelerator clients. WKU has indicated a high degree of flexibility in developing this certification program, but note this is merely a possible example, and it has not been approved by WKU. We deliberately chose not to pursue WKU approval at this time due to the fact that a full business accelerator program has not been established. It should also be noted that all classes accomplished in pursuit of this certification program may be applied toward a formal bachelor's degree.

DBA Information Systems Certificate:

Classes needed to complete this certification program are as follows:

CIT 300. 3 Hours. On-line Training Foundations. Introduces students to educational technology and the distance education process.

CIT 302. 3 Hours. Web Development. Introductory course in web design and development. Provides students with strategies and skills to plan and develop commercial web sites. Major topic covered: HTML-based web design.

CIT 310. 3 Hours. Introduction to applied technology and computer architecture. Emphasis will be on hardware specification and selection, troubleshooting, maintenance, and optimizing system performance. Major topic covered: computer hardware (A+).

CIT 330. 3 Hours. Systems Development I. Emphasis on system-development tools commonly used in businesses and organizations. Includes advanced topics such as interfacing systems with databases and web applications. Major topic covered: Programming logic/design.

CIT 350. 3 Hours. Database Administration. Introduction to database applications and related fundamentals including database models, normalization, and principles of effective database application design. Major topic covered: Relational databases introductions.

CIT 370. 3 Hours. Telecommunications I. Overview of modern networking systems, including networking fundamentals, local area networks, routing, addressing, wide area networks, remote access, and security. Emphasis on applied technology used in organizational settings. Major topic covered: Introduction to Networking (Net+).

CIT COURSE AVAILABILITY

CIT 300 On-Line Training Foundations

CIT 302 Web Development

CIT 310 System Architecture

CIT 312 System Architecture II

CIT 330 System Development

CIT 332 System Development II

CIT 350 Database Systems I

CIT 352 Database Systems II

CIT 370 Telecommunications I

CIT 372 Telecommunications II

CIT 412 Adv. System Architecture

CIT 414 Adv. System Architecture II

CIT 416 System Administration I

CIT 418 System Administration II

CIT 432 Adv. System Development I

CIT 434 Adv. System Development II

CIT 436 Web System Development I

CIT 438 Web System Development II

CIT 452 Adv. Database Administration I

CIT 454 Adv. Database Administration II

CIT 456 System Analysis & Design I

CIT 458 System Analysis & Design II

CIT 472 Adv. Telecommunications I

CIT 474 Adv. Telecommunications II

CIT 476 Network Administration I

CIT 478 Network Administration II

CIT 482 System Security I

CIT 484 System Security II

CIT 486 Knowledge Management

CIT 492 Technology Management I

CIT 494 Technology Management II

CIT 496 Technical Support Admin.

X00 Foundation Classes

X10 System Architecture Classes

X30 System Development Classes

X50 Database Administration Classes

X70 Telecommunications Classes

X80 Special Topic Classes

X90 Tech. Management Classes

Replication of Model:

The flexibility of the LTADD Applied Education Accelerator Model allows the replication of the three primary elements individually - EAE – Focused Education (IRIE) – Functional Work Space Facilities – in any order based on demand and financial support while assuring the scalability and sustainability of each active element.

As an example, Nelson County may elect to implement the IRIE and focus on an element of Medical Services education via a remote classroom in Bardstown, KY and

the EAE for Nelson County while developing funding sources for Work Space Facilities at a future date.

This flexibility acknowledges funding constraints, facility selection and a commitment to economic development via the support of emerging business opportunities within the community. We must anticipate change and be prepared rather than reacting to yesterday's reality.
Policymakers and educators must become astute technology consumers, planners and overseers. Education leaders will need a firm grasp on what technology can and cannot do for teaching and learning, as well as a working knowledge of effective strategies to implement technology in schools and c olleges and the workforce. Participants will enter a classroom that is forum based and focused towards a holographic projector that will enable discussions to be had by members of academic communities that reside in other states and countries, as easily as if they were in the same room. With this technology, it's possible to have the best professors in the world, teaching students around the world simultaneously. Without appropriate revisions in pedagogical practices, the preparation and support of classroom educators and alignment among plans, policies and practices: technology may be poorly implemented.

Funding implications are multifold and important programs may be cut to reallocate resources to technology. Decision makers must move from one-shot funding initiatives to steady funding streams that allow for ongoing technical support, upgrades, maintenance and training. To the extent this is accomplished through resource reallocation, it probably will be a difficult and unpopular task for elected officials.

The rapid increase in the growth of information, the collapse of the information float, an increasingly global marketplace, computers continuing to increase in power while dropping in cost, computer chips expanding by shrinking, "free" bandwidth and expanding network power will have measurable implications for the workforce.

We must overcome complex barriers to deliver technologically fluent workers to the marketplace.