WATC New Program Development Process

As a technical college that prides itself on responsiveness to the needs business and industry it is not unusual for WATC to have multiple new programs in various stages of development at any one time.

New Program Development Process

WATC engages in a new program development process that facilitates program development from idea to implementation. The program development process has five phases including: program proposal, research, curriculum development, program approval, and program implementation. The Executive Director, Strategic Innovations facilitates the program development process to ensure all stakeholders engage in the appropriate times. The facilitation also ensures that quality and efficiency is maintained throughout the development timeline.

Program Proposals

Program proposals derive from various sources. Often the college is approached by representatives from business and industry in response to emerging or evolving workforce needs. Programs are also proposed through internal research and development projects which focus on ongoing monitoring of economic demand data and analysis of employment forecasting in the Wichita and surrounding area. Program proposals can also emerge from national trends in employment and emerging technologies.

Research

The research phase of development consists of two components: program demand assessment and curriculum bench-marking. The Director, Institutional Research conducts a program demand assessment while the Executive Director, Strategic Innovations conducts curriculum benchmarking research.

Program Demand Assessment

Student Needs Assessments
Per the requirements of the Kansas Board of Regents (KBOR), prospective students are surveyed in order to determine the student demand for potential WATC programs. Various factors influence the prospective student groups who are surveyed. Each of these factors is considered when designing student needs assessments.
- Type of program
- Number of programs being asked about
- Access to prospective students
- Number of prospective students being surveyed

Each year WATC surveys three distinct groups of prospective students: GED graduates, prospective WATC students, and area high school students.

1. GED Graduates from the previous year are mailed or provided a survey asking about interest in current and potential WATC programs.

2. Prospective WATC students are given an opportunity to identify interest in potential WATC programs after completing an information request via the WATC website. The information and survey located on the WATC web site is updated as needed based on employer needs.
3. Area High School students are surveyed regarding potential WATC programs.

Once the programs and students have been identified, a survey instrument is developed by the Director, Institutional Research and distributed to the identified prospective student groups. Students are provided a short description and are asked to indicate their interest in the potential program.

The results gathered from student needs assessment surveys are aggregated and combined with the employer needs assessment information and, Department of Labor statistics. These survey results are then used to create the overall program needs assessment report. An analysis of findings indicating overall student interest is provided in the summary section of this report. A table is provided describing total number of student responses and how many students indicated an interest in the identified program. The report and supplemental tables are provided to the Chief Academic Officer.

The report and tabulated student interest in the identified program(s) is provided to KBOR to describe student demand and how the level of interest was determined. Prospective student information is submitted to Student Services.

Employer Needs Assessments
WATC surveys local businesses and industries in order to determine the current and future job forecasting and talent acquisition needs. WATC develops, administers, collects, and analyzes the results of the employer needs assessments. Employers are determined based on the type of program being proposed.

Once the survey is complete, Director, Institutional Research provides a detailed report of the findings. Annually, WATC sends a generic needs assessment survey to numerous Wichita-area employers to determine current job market trends.

Employers and contacts are selected based on the proposed program and determined through the following methods:
• Membership in WATC Program Industry Advocate Team or Curriculum Development group
• Membership in professional organization or society
• Wichita Business Journal List or other List of companies by industry
• Internet research
• Suggestion of WATC staff or other constituent

Employers are asked their opinions of the need for a program and whether they would hire a WATC graduate. The survey provided to employers also consists of questions pertaining to number of current employees in the position, number of potential new hires and/or replacements over a two-year period, and potential starting wage. For program areas with multiple types of employment, employers are asked to indicate figures for each area. When possible, employers are also asked if they would be interested in training for current employees in the program area. Employers indicate if they would be interested in serving as an Industry Advocate Team committee member. The employer information is presented in table form from all survey respondents. These results include the number of companies describing a need for program graduates, potential number of open positions, and estimated starting wage. For external usage, the name of the company or organization is withheld.

In addition to survey data, information is also gathered from accessible Internet sites pertaining to the occupational outlook and wage information for identified program areas. This information is gathered from the U.S. Department of Labor, Kansas Department of Labor, U.S. Census Bureau, and any other applicable organization that provides job projection, growth, and wage information. The information provided by employers is compared to the forecasted job growth as determined by this research. The analysis along with the results of the employer survey is used to determine the employer need for the program. This information is included in the summary of the overall program needs assessment report. Furthermore, the summary information provided in the report and the supplemental tables are used to identify the employer demand/labor market need, employment trends and projections, and estimated starting wages, which is the requirement set forth on the KBOR CA1, New Program Request Form.

Timeline
The Employer Needs Assessment is carried out in the fall term. Following the results of this survey, and input from other outlets, the Student Needs Assessment is completed in the spring term. As new areas of program development arise, WATC will supplement the research with a topic-focused needs assessment.

Decisions on Results
The results of the needs assessments are provided to the Chief Academic Office and/or Chief Instructional Officer. These individuals then present the findings to the WATC Leadership Team. The Leadership Team makes the final decision on whether the information presented warrants the decision to continue the pursuit of program development.

Benchmarking

The next step in the research phase is benchmarking of what is currently available in the educational marketplace through a curriculum crosswalk process. This process includes a review at the program and course level and includes collecting additional data needed during the development process.

Program Level Crosswalk
The Executive Director, Strategic Innovations , begins the process by reviewing the curriculum offerings of a baseline set of institutions (See Table 1) which include technical colleges, community colleges, proprietary schools and universities. Institutions that are geographically within 90 miles of WATC are automatically part of the baseline due to "duplication of existing program" requirements set forth by the Kansas Board of Regents. These requirements include identification of similar programs based on CIP codes as well as content. Other reasons for inclusion in the baseline are K – 16 articulation paths, reputation for excellence, creativity in curriculum design, and/or project based curriculum. Additionally, at least two institutions known for excellence in the field are added to the list. Once the baseline review is completed the search is broaden by utilizing a variety of sources including internet sites such as ONVEON (http://www.onveon.com/), industry related sources such as SAE International, Chronicle of Higher Education, recommendations from interested parties, and general Google searches for key words.

Table 1

BASELINE INSTITUTIONS	
Butler Community College	Pratt Community College
Cowley Community College	Wichita Technical Institute
Everett/Edmunds Community College (Aviation Only)	Wichita State University
Flinthills Technical College	Field based choice
Hutchinson Community College	Field based choice
Salina Technical College	Field Based Choice

Benchmarking allows the development team to determine the general focus of the curriculum offerings of each of the baseline institutions as well as four or five of the other programs found during the search process. Official program descriptions, course sequences, course descriptions, program length, percentage of hands-on educational opportunities are all reviewed and captured on the Program Benchmarking form. In addition, other pertinent information is collect at this point including cost of the programs, on-line offerings, industry certifications, and equipment/laboratory needs that may be of assistance as the program moves forward in the development process.

Course by Course Crosswalk
The next step is the benchmarking by course across the institutions. This process entails comparing course descriptions/outcomes/competencies across multiple programs looking for similarities in course areas. General Education requirements are reviewed along with courses in the major area of study. This information is recorded on a course by course benchmarking form. The course by course benchmarking form allows for the collection of additional information such as project based courses, and corresponding WATC courses.

Industry Benchmarking

Some program curriculum is just not available for crosswalk through other institutions. When this happens the Executive Director, Strategic Innovations turns to industry for assistance. The Executive Director, Strategic Innovations contacts representatives from multiple business and industry partners to obtain an outline of what should be in the sequence of the program. This information and relationship forms the bases of the curriculum development which occurs later in the process.

Accreditation and Industry Certification
The Kansas Board of Regents requires that all program proposals include information on required and/or available program level accreditation and industry recognized certifications. In the research phase the information is gather about potential program accreditation and student certification/credentials requirements. The data is presented to Curriculum Committee members for review and recommendations.

Benchmarking Analysis
Once all the data is collected the Executive Director, Strategic Innovations analyzes it with the goal of creating high level curriculum documents including draft program outcomes, draft configurations and draft course standards. First, common course areas which appear across all the benchmarked institutions are identified.   Next, the courses that appear regularly and those that are unique are

identified.   The course areas that are common to all institutions are utilized as a starting point for the draft program configurations. Regularly occurring and unique course areas may or may not end up in the final program outline depending on the curriculum committee work that occurs later in the curriculum development phase.   Some program areas particularly, in highly regulated fields such as health care have prescribed curriculums. In this case the analysis phase focuses only on optional curriculum courses if applicable. Additionally, some program areas may be so unique that little to no information is available to create the draft documents. In this case the first development of the documents will take place in curriculum committee meetings.

Curriculum Development

The majority of the work required to create a new program takes place in the curriculum development phase. This phase includes the expertise of the Executive Director, Strategic Innovations and a variety of other experts from both inside and outside the college.

Curriculum Committee – Identification of Subject Matter Experts (SME's)

Once the benchmarking step is complete, a team of people (Curriculum Committee) charged with the design and development of the curriculum is created. A typical team is composed of content experts and/or contributors known as SME's , Academic Leaders such as deans and or directors from the appropriate department, and the Executive Director, Strategic Innovations who facilitates the process. SME's are selected to participate on the team in a variety of ways including, but not limited to, business and industry leaders in the field, volunteers from professional associations related to the program, members of the academic leadership team, WATC faculty, WATC lead instructors or dean. Other employees of WATC such as the Director, Institutional Research and/or members of the Student Services team attend meetings as needed.

Course Standard Development

Using the draft program outcomes and configuration as a guide the Executive Director, Strategic Innovations creates a draft of course standards with outcomes and competencies for each course in the sequence. There are various sources from which to pull outcomes and competencies including current WATC course work, syllabi or competency lists from other institutions or research in the field. It is the Executive Director, Strategic Innovations' responsibility to ensure all outcomes and competencies adhere to the standards of Bloom's Taxonomy. The WIDS (World Wide Instructional Design) software is available to assist with the development and linkage between program outcomes and course level outcomes and course competencies.

General education course standards are available on the WATC Intranet. The Executive Director, Strategic Innovations provides the committee with the standards to review but explains that no changes are allowed as these courses are taught across the college curriculum and meet KBOR standards.

Curriculum Committee Meetings

The first curriculum committee meeting is critical for developing relationships and expectations for the group. This meeting has seven goals including:

1. Obtain consensus on what position the students will be qualified for once they complete the program
2. Identify additional benchmarking requirements based on SME input
3. Educate SME's on the structure of college programs in Kansas, general education requirements and impact of financial aid.
4. Educate the group on the importance of communicating back to their organization about progress/needs of the Curriculum Committee
5. Educate the group on Workforce Initiative Program
6. Educate group on what deliverables will result from Curriculum meetings
    i. Develop Program Outcomes
    ii. Develop program configuration for AAS/TC and or COC
    iii. Develop Technical Course Standard
        1. Course descriptions
        2. Outcomes
        3. Competencies
    iv. Select of appropriate general education courses (if applicable)
    v. Identify delivery modalities available/possible for technical and general education courses
    vi. Identify Equipment Requirements
    vii. Identify program accreditation and student certification requirements
    viii. Identify Admission Requirements – recommendations
    ix. Identify Faculty Qualifications- recommendations
    x. Obtain Industry Endorsements/Letter of Approval
    xi. Identify Industry Advocate Team Member
7. Identify expected completion date for curriculum committee
8. Determine meeting schedule

The second curriculum committee meeting has three goals:

- Review the benchmarking material for the program
- Obtain consensus on the major curriculum areas to be developed in the program
- Obtain consensus on program outcomes
- Work through at least one course standard in order for the SME's to experience the process

Subsequent meetings of the curriculum committee follow a consistent pattern. The Executive Director, Strategic Innovations provides a draft of course standards with outcomes and competencies as a starting point for conversation on what should be in each course. Committee members review the standard, adding and deleting competencies as necessary. The Executive Director, Strategic Innovations makes the changes and presents them for review at the next meeting along with a course description.

Program Outcomes

The Executive Director, Strategic Innovations is responsible for ensuring the course reviewed/created during this phase meet the program outcomes as determined by the group. As each course standard is completed the Executive Director, Strategic Innovations asks committee members which program

outcome(s) is fulfilled by this course and records the information on a crosswalk document or within the WIDS (World Wide Instructional Design System) software.

Course Clock Hours/Credit Hours

The Executive Director, Strategic Innovations is responsible for ensuring all courses follow the Carnegie Unit formulation adopted by KBOR and WATC and the credit limits established by KBOR. The Executive Director, Strategic Innovations must be prepared to educate the SME's concerning the requirements and help them adjust course content to meet the requirements.

Course Delivery Method

As content delivery modes are explored, careful consideration is given to the possibility of online and/or hybrid format delivery. Any program or courses within a program that are identified as candidates for online development will be concurrently prepared in those modalities. Committee members with experience in online course/program delivery will be used to ensure that the online components are compatible with the face to face parts of the curricula. However, the Executive Director, Strategic Innovations must be prepared to educate committee members on the potential of online and hybrid delivery methods as many have never experienced this type of learning. Additionally, SME's are asked to provide input on course sequencing within program thereby establishing course pre- requisites.

Program Configuration- Course Sequence

As the curriculum committee completes the development of each course standard the Executive Director, Strategic Innovations updates the program configuration in WIDS. The Executive Director, Strategic Innovations is responsible for ensuring the program is developed within the credit limit guidelines determined by KBOR and meets federal financial aid requirements. Executive Director, Strategic Innovations also works with the Curriculum committee members to determine the course sequencing for all levels of the curriculum including AA, TC and COC if applicable.

At this point the program configuration is ready for final approval signatures from the curriculum committee members and to have course numbers assigned. The Executive Director, Strategic Innovations initiates the approval sequence using the WIDS software.

Program Entry Requirements

The Executive Director, Strategic Innovations will work with the appropriate dean to review program entry requirements. During this process the required pre entry testing, passing scores will be identified.

Equipment and Facility Requirements

While most of the deliverables can be handled in a maximum of one or two meetings, equipment needs require additional research. The Executive Director, Strategic Innovations facilitates the collection of these requirement from various sources including faculty, members of the curriculum committee, business and industry contacts, and the WATC facilities department. The information on equipment and facility needs and costs are submitted along with the program proposal to the KBOR.

Letters of Endorsement

One of the last deliverables from the curriculum committee members is the letter of endorsement or approval of the program. These letters are required by the KBOR. The KBOR regulations do not give details on what should be included in the letters however; past experience indicates there are four compulsory elements for the letters of endorsement.

These elements include:

- Letters must be original and not based on a template
- Letter must be on company stationary
- Letter must state the company is in support of the program
- Letter must state the company would be willing to hire graduates of the program

To ensure all the elements are included in the letter the Executive Director, Strategic Innovations provides a sample letter and reviews the necessary elements with the SME's.

Approval Process

New programs must be approved by a series of internal and external stakeholders. Internal stakeholders include SME's, leadership team, faculty committees and the Board of Trustees. External stakeholders include other institutions, Technical Authority Board and the Kansas Board of Regents.

Approval Process - Internal

A new program proposal must obtain approval from three different internal stakeholders before entering the external approval process.

Step #1 – SME group approval
- The SME group approves the program configurations, course descriptions and competencies for the new program. Approval is indicated by voice vote recorded in the minutes.

Step #2 – Internal departmental approvals

Using the WIDS programs review process the students services, financial aid, finance and registrar provide input/approval on each new program .

Step #3 – Faculty Council
- The Executive Director, Strategic Innovations presents the new program sequence and description to the Faculty Council committee for approval. Approval is indicated by meeting minutes
- If approved, the program progresses to Step #4.

Step #4 – Board of Trustees (BOT) approval
- The Executive Director, Strategic Innovations presents the new program to the entire BOT for their review and approval. Approval is indicated by meeting minutes
- If approved, the final documentation procedures take place (see below) and the program is submitted to the Kansas Board of Regents (KBOR).

Approval Process - External

In the state of Kansas new programs in technical higher education must be submitted for 14-day review by other intuitions of higher learning, be approved by both the Technical Authority Board, a sub set of KBOR designed to review technical programs, and the Kansas Board of Regents. The progress of the new programs through the approval process is facilitated by either the Chief Instructional Officer or Chief Academic Officer.

- Public Review: 14 day electronic review
- Technical Education Authority Curriculum Committee
- Technical Education Authority
- Kansas Board of Regents Curriculum Committee
- Approval by the Kansas Board of Regents.

Approval Documentation

The Executive Director, Strategic Innovations compiles the documentation that will be sent to the Kansas Board of Regents. This documentation follows the prescribed format and requirements set forth by the KBOR. The documentation is presented via a standardized template which addresses the criteria required by KBOR as well as the KBOR forms associated with new programs. The template includes a great deal of the information which has already been collected or created throughout the development process including needs assessment data, benchmarking data, financial data, and course standards.

Once a proposed program has completed the internal approval process (see above) the following steps.

- Executive Director, Strategic Innovations completes and submits all KBOR documentation to the appropriate Chief Academic Officer for signature
- Executive Director, Strategic Innovations, applies PDF formatting and e-mails documentation to KBOR
- The Director, Institutional Research enters the program into KBOR databases (*Program Inventory and Courses Within Programs*)on the same date the program is e-mailed to KBOR

It is important to note that at any point in the external approval process representatives of KBOR may refer a program proposal back to the WATC for revisions/changes. If a program is returned to WATC for a revision/change the Executive Director, Strategic Innovations coordinates the revision with the appropriate personnel including members of academic team and curriculum committee members. The proposed program with the required revisions is returned to KBOR within the time frame set by KBOR personnel.

Program Implementation

Upon receiving KBOR approval for the new program, the member of the Academic Leadership Team begin the internal process to implement the program.