Tech Prep, Associate of Applied Science Degree Programs

Tech Prep is an education initiative linking high school career and technical course curriculum and teacher credentials to college technical/workforce course curriculum and faculty credentials on a 2-year associate of applied science (AAS) degree through articulation. Tech Prep takes the form of a 6-year degree plan with 4 years of high school and 2 years of an AAS degree. Tech Prep degree programs provide students the opportunity for career exploration while acquiring essential technical work skills.

A Tech Prep AAS degree program must provide the following components to be approved by the Texas Higher Education Coordinating Board (THECB) and the Texas Education Agency as a Tech Prep program:

A. combines a minimum of 2 years of secondary education (as determined under State law) with a minimum of 2 years of postsecondary education in a non-duplicative, sequential course of study;

B. integrates academic with vocational and technical instruction; and utilizes work-based and worksite learning where appropriate and available;

C. provides technical preparation in a career field such as engineering technology; applied science; mechanical, industrial, or practical art or trade; agriculture; health occupations; business, or applied economics;

D. builds student competence in mathematics, science, reading, writing, communications, economics, and workplace skills through applied contextual academics and integrated instruction, in a coherent sequence of courses;

E. leads to an associate or a baccalaureate degree or a postsecondary certificate in a specific career field; and

F. leads to placement in appropriate employment or to further education.

(as cited in the Guidelines for Instructional Programs in Workforce Education-GIPWE, 2001, p. 27, sec. 202, a-3).

Developing a New Tech Prep 6-year plan

New AAS degree plans, not yet Tech Prep, must be converted to Tech Prep by meeting the above criteria. Once the faculty teams and business/industry partners determine a need for a program and curriculum is in place, it is the responsibility of the Curriculum and Instruction department at the LSC-System Office to submit the new program conversion to the THECB for approval.

Upon recognition of the AAS program, the Tech Prep Coordinator determines if any of the courses are already articulated through ATC or if any courses possibly match area school district offerings. If the results are positive, then the coordinator submits a conversion form to TEA with one school district’s 6-year plan. Upon approval of that plan as Tech Prep, the coordinator may submit add-on forms, also to TEA, for any other school districts offering matching courses on the new degree plan.
**Updates to existing 6-year Degree Plans**

The 6-year plan is developed during the annual meeting between the ISD Administrator and the college system’s articulation representative or Tech Prep Coordinator. School districts may offer matching courses in approximately thirty LSCS AAS degree plans with Tech Prep status. An evaluation of courses offered at the ISD is compared to courses required on each AAS degree plan.

If the ISD is offering at least one course that will articulate into the college degree plan, then a Tech Prep plan is possible. This is referred to as the 1-2-3 rule for developing Tech Prep plans. There must be at least one articulating course, a minimum of 2 Career and Technical Education (CTE) courses equaling 3 or more high school credits. In most cases there are at least 3 CTE courses on the high school section of the 6-year plan format.

If 6-year plans are added to a school district’s collection, then an add-on form is submitted with the 6-year plan to TEA for approval. Please note, before any documents are sent to TEA for final approval, the school district is provided the opportunity to review and suggest any additions or corrections to the plan. After the initial meeting, any correspondence is generally handled via phone and email.

**Inventory of Tech Prep plans**

An internal inventory was developed in 2006 to compare to the state produced inventory and is managed by the Tech Prep Coordinator. At the close of the 2007-2008 school years, LSCS had more than 850 Tech Prep plans for 5 college campuses and 26 ISDs.

Tech Prep Texas manages another database inventorying Tech Prep plan agreements between all community and technical colleges and school districts. This listing is accessible via the internet at this web link, [http://www.techpreptexas.org/consortia/state.shtml](http://www.techpreptexas.org/consortia/state.shtml).

A sample Tech Prep 6-year plan is provided in Appendix E of this Manual.
ARTICULATION
What is Articulation?

Lone Star College System (LSCS) is committed to providing a variety of methods for granting credit to students for competencies and skills attained outside of the traditional college classroom. These opportunities for earned credit are described at length in the Prior Learning Assessment (PLA) Manual and it is available online at www.LoneStar.edu/tech-prep.

The purpose of this section is to define and describe articulation as it pertains to secondary and post-secondary partnerships, a.k.a. High School Articulation. The definition of articulation for this manual is a process of matching course curriculum, methods and materials, and faculty credentials to bridge the gap between high school and college instruction and reduce course duplication.

Additionally, articulation of course specifics occurs only between Career and Technical Education courses in the high school and Workforce Education courses in College. This can sometimes be confused with dual credit, thus a comparison chart of typical college credit opportunities is provided below:

<table>
<thead>
<tr>
<th>Articulated Courses</th>
<th>Dual Credit Courses</th>
<th>Advanced Placement Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>No testing required until college course placement</td>
<td>College level placement test scores required</td>
<td>No testing required until college course placement</td>
</tr>
<tr>
<td>No tuition or fees</td>
<td>Half tuition and all fees required</td>
<td>Payment for testing to College Board exams</td>
</tr>
<tr>
<td>Technical skill acquired – applicable to work</td>
<td>Mostly Academic – minimal technical skill acquired</td>
<td>Mostly Academic - minimal technical skill</td>
</tr>
<tr>
<td>Student meets criteria and applies for credit</td>
<td>Automatic Credit</td>
<td>Student meets criteria and applies for credit</td>
</tr>
<tr>
<td>Agreement between LSCS (all campuses) and ISD</td>
<td>Agreement between college campus and ISD</td>
<td>LSCS faculty teams decide which exams cover what course material</td>
</tr>
<tr>
<td>Courses transfer in a completed AAS to partnering universities</td>
<td>Courses transfer individually to accepting universities</td>
<td>Credit may or may not transfer, depends on the institution</td>
</tr>
<tr>
<td>Credit toward Distinguished Achievement Program (DAP)</td>
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</table>
Subject Areas and Degree Programs
Career and Technical secondary courses fall into several categories. These subject areas are based on the Texas Education Agency (TEA) Career and Technical Education (CTE) course catalogue and Achieve Texas 16 Career Clusters accessible at this web link: http://www.tea.state.tx.us/cte/catalog/catalog.html.

- Agriculture, Food, & Natural Resources
- Architecture & Construction
- Arts, A/V Technology & Communications
- Business, Management & Administration
- Education & Training
- Finance
- Government & Public Administration (no courses currently available)
- Health Science
- Hospitality & Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections & Security
- Manufacturing
- Marketing, Sales & Service
- Science, Technology, Engineering & Mathematics
- Transportation, Distribution, & Logistics

College faculty teams with the help of business partners design degree programs according to current industry needs and labor market trends. Many of the subject areas listed above for secondary schools align with the types of programs community and technical colleges are implementing and developing. The process of high school to college course articulation is the starting place that creates a seamless transition from high school to college to work.

The following sections explain two types of course articulation and how they work with Tech Prep programs. Also, you will find a section that addresses benefits and responsibilities of the student and their parents, the school district, and the college district.
Types of Articulation

Advanced Technical Credit (ATC)

ATC, formerly called Statewide Articulation, is a process of matching common courses taught throughout the state to broaden a student’s opportunities for course credit. This process involves an ATC guided meeting of curriculum experts in community and technical colleges and independent school districts. As courses are selected and curriculum is agreed upon, ATC presents a course crosswalk with course outcomes and specifics as well as course numbers for both institutions. You may access this crosswalk through this link: www.atctexas.org.

Advantages
The advantage of ATC articulated courses is that students who complete such coursework in high school may be eligible for college credit at any ATC participating community or technical college in the state of Texas which offer the matching course. Another advantage of ATC is that the committee of representatives handles the subject matter grouping, course review, and maintenance for all participating schools in the state.

Professional Development
In order for students to receive college credit for an ATC articulated course, the teacher of their course must meet eligibility requirements set by the Southern Association of Colleges and Schools (SACS) and participate in training with college faculty every 3 years. This training or professional development opportunity offered to secondary school teachers involves a discussion of curriculum with college faculty teaching the linked course, as well as an application to teach the course that is reviewed and approved by ATC personnel at Stephen F. Austin State University (SFASU).

Local Articulation

Locally articulated courses are created through a similar process as the ATC courses, however a significant difference is that this articulation is between two institutions, the school district and the college district, rather than a statewide initiative. This process does not involve state organizations or a committee of representatives.

Locally articulated courses may be found in the ATC crosswalk, but not always. In most cases, a locally articulated course is established because either this high school course or the college course the course is not listed on the crosswalk, yet a curriculum/credential match still exists. Additionally, students are only guaranteed credit for a locally articulated course at the contracting college.

The Process
The evaluation of curriculum begins with an annual meeting between the school district’s Career and Technical Education Administrator and the college district’s designated articulation representative, usually the Tech Prep Coordinator. Once courses are recognized as possible curriculum matches, the college representative will request course specifics from the ISD Administrator via a local course articulation application.
Once the information is received, the college representative sends the course specifics to the subject area curriculum team for review. If a match is determined, then a competency chart is completed, along with a formal contract to establish the local course articulation. The formal contract is first signed by the college district and program representatives, then by the ISD Administrator and finally, it is stored in the Curriculum and Instruction department at LSC-System Office.

The local course articulation agreement remains in good standing as long as the two institutions are offering the course agreed upon without curriculum or course name changes. These contracts are revisited in the annual meeting between the ISD Administrator and the college district articulation representative. If there is a curriculum change on either part, then the agreement is either revised and a new formal contract is completed or the contract is cancelled. If cancelled, the ISD receives formal documentation requiring a signature.

**Advantages**

Although this process is time consuming, the recruiting benefits make it well worth the effort. High school students are aware of the programs at their nearest community college and how they can begin the coursework in high school through completing locally articulated courses. Another advantage of locally articulated courses is the personal connection and partnership between the college program faculty and the high school teachers. Local articulation also serves to create course linkages outside of those established by ATC.
Applying for College Credit for Articulated Courses

There are several requirements the student must meet to be eligible for high school articulated credit.

1. The student must graduate high school, enroll in the community college, and apply for credit within 15 months of their graduation date. (36 months for nursing students)

2. The student must have completed the course or sequence of high school courses with a grade of 80 or above.

3. The student must have completed the course or sequence of courses in their Junior or Senior year in high school. Credit may be awarded for Freshman and Sophomore level CTE courses as long as the student is eligible for and requests articulated credit for a Junior or Senior level course.

4. The course(s) sought must be a part of or related to the student’s declared major or degree plan, including electives on a degree plan.

Note: Credit will be granted in the form of CR on the student’s transcript after completing 6 semester credit hours (sch) of regular, non-developmental course work at LSCS. They have one year from the date of their application to complete the 6 sch, (10 sch for nursing students). It is the student’s responsibility to request credit and track their eligibility within the time restraints outlined above.

High School Transcript Coding
The student’s high school transcript is critical to the credit awarding process. This is the official document college personnel review to determine student eligibility for credit.

TEA and ATC require independent school districts to include an “A” course type code on the transcript to indicate completed articulated courses. ***We cannot award credit without the A.
Benefits of Tech Prep and Articulation

Benefits for Students and Parents

- Saves money on tuition, fees, and books
- Fast Track to degree completion
- Strong academic competencies
- Employability in quality jobs
- Self-confidence in a high-tech world
- Opportunities for advanced education

Student Responsibilities

- Meet eligibility requirements
- Meet with an Advisor at the college campus with High School transcript
- Notify the Advisor of possible articulated credit

Benefits for High Schools

- Higher standardized test scores
- Lower drop out rates
- Higher graduation rates
- More College bound students
- Higher student motivation and morale

High School Responsibilities

- Code the course type with “A” on the transcript, where appropriate
- Send a copy of the official transcript in a sealed envelope with the student
- Provide enhanced course curriculum to match the college course learning outcomes
- Encourage ATC training for Career and Technical Education teachers
- Identify students as Public Information Management System (PEIMS) student code 3 when they elect to follow a Tech Prep 6-year plan
- Utilize correct PEIMS course numbers to match course titles as indicated by TEA

Benefits for LSCS

- Better prepared students
- Reduced need for remediation
- Higher graduation rates
- Students interested in field of study chosen

LSCS Responsibilities

- Assess students’ transcripts for possible articulated credit
- Ask students whether they may have courses to articulate
- Maintain updated records online and hard copy
- Initiate annual Tech Prep update meetings
- Provide new program information to ISD
- Market Tech Prep programs and Articulation opportunities

Questions or comments, please contact Lakisha.M.McDowell-Bates@LoneStar.edu