Applied Technology Education Study

October 14, 2003

Report to the Executive Appropriations Committee
Of the Utah State Legislature

Prepared by
The Office of the Legislative Fiscal Analyst

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Michael Kjar
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Since the creation of the Utah College of Applied Technology (UCAT), as the tenth institution of higher education in September of 2001, the Legislature and the educational systems have been concerned about the role of applied technology education (ATE) for UCAT, the Utah System of Higher Education (USHE) and Public Education. The underlying discussions by both the Higher Education and Commerce and Revenue Subcommittee members were based on five major issues: access to students; cost of applied technology education by the delivering institutions; duplication or overlapping of services; articulation agreements; and partnerships. The Public Education Appropriation Subcommittee specifically identified a study be performed of “overlapping applied technology services.” However, the Higher Education and Commerce and Revenue Appropriation Subcommittees were more general in their request for a study of applied technology education. During the 2003 General Session, intent language was included in House Bill 1 and House Bill 3, requesting a study of applied technology education by the Legislative Fiscal Analyst.

The following intent language was passed in the Higher Education and UCAT sections of House Bill 1:

*It is the intent of the Legislature that a study be performed of applied technology education in the state with the Utah System of Higher Education, Public Education, and the Utah College of Applied Technology, by the Office of the Legislative Fiscal Analyst in conjunction with the Governor’s Office of Planning and Budget. It is further the intent of the Legislature that a written report be presented by October of 2003 to the Executive Appropriation Committee, and also reported to the appropriate Legislative Appropriation Subcommittees during the 2004 General Session.*

Similar intent language was passed in the Public Education section of House Bill 3:

*It is the intent of the Legislature the Office of the Legislative Fiscal Analyst, in conjunction with the Governor’s Office of Planning and Budget; perform a study of overlapping applied technology services of the Utah System of Higher Education, State System of Public Education, and Utah College of Applied Technology. It is further the intent of the Legislature that a written report be presented to the Executive Appropriations Committee by October 2003 and to the appropriate legislative appropriations subcommittees during the 2004 General Session.*

The original objective of this study is to evaluate access and availability, cost, and efficiency of applied technology education provided by higher education and public education. Because of insufficient data, the cost component of the study will be completed in FY 2005.
Access and availability:

1. Entry level ATE courses are available to all secondary students. However, the rural secondary students do not have access to upper level ATE programs. Adults in the rural communities have limited access to ATE programs. The Analyst recommends that the Legislature may want to consider funding UCAT similar to Public Education’s Necessarily Existent Small Schools (53A-17a-109 of UCA). The additional funding for UCAT is to expand ATE offerings in underserved areas.

2. The Analyst recommends that ATE concurrent enrollments be separated from academic concurrent enrollments by headcount and credit hours awarded to improve the accuracy of the secondary vocational education enrollment statistics.

Efficiency:

3. There does not appear to be a significant amount of duplication of program offerings between the educational systems. However, of concern are the instances where UCAT and USHE are offering what appears to be the same certificate or AAT/AAS degree without adequate documentation to support the duplication. The Analyst recommends that each region document the justification for duplication of degrees or certificates within a region. This information should be available for review by the Governor’s Office of Planning and Budget and the Office of the Legislative Fiscal Analyst.

4. The systems have started the process of drafting articulation agreements. One concern is that the USHE institutions are not involved in the development of the AAT degree with UCAT. The Analyst recommends that the educational systems work together on the development of new program offerings including AAT degrees, and articulation agreements in order to create a seamless educational system.

5. Partnerships have been developed. The Analyst recommends that the Utah System of Higher Education, Public Education and the Utah College of Applied Technology continue to work together to develop regional plans to meet the needs of vocational students without creating unnecessary program duplication.

History

Applied technology education has become an essential component of the Utah educational systems. Society has increasingly become a global environment bringing about dramatic changes in the workplace requiring a greater emphasis on technological training. Currently, applied technology education (ATE) is provided by nine of the ten Utah System of Higher Education (USHE) institutions (the University of Utah does not have an ATE mission), the nine campuses of the Utah College of Applied Technology (UCAT) and Public Education’s 40 school districts. The purpose of applied technology education (ATE) is to meet the social
and economic needs of the state efficiently and effectively through collaborative partnerships between the educational systems, business, and industry with quality educational programs and innovative delivery systems to ensure a skilled and educated workforce.

ATE programs in higher education, including UCAT focus on job preparation and offer short-term, intensive competency-based training programs tailored for business and industry ending in certificates or associate degrees. Public Education programs primarily concentrate on offering exploratory and basic skill applied technology training, although in some instances advanced training is provided.

UCAT is in the process of seeking accreditation through the Council on Occupational Education and the Northwest Commission on Colleges and Universities.

### Access and Availability

The opportunity for all students to have access and availability to applied technology education is of great concern to educators and legislators alike. The first component of this study is to evaluate access and availability of ATE programs by secondary and post secondary students. The analyst evaluated the enrollment data and the program offerings to determine the availability and access to ATE programs throughout the state.

### Access and Availability for Secondary ATE Students

In September of 2001, legislation changed the Applied Technology Centers/Service Regions from public education to higher education and created UCAT. In addition, in the 2003 General Session, House Bill 161, “Snow College Richfield Campus,” merged UCAT’s Central Applied Technology Campus with the Snow College Richfield Campus. With this change in governance, the Legislature wants to ensure that secondary students would continue to have access to applied technology education as required in the following sections of the Utah Code:

Section 53B-2a-104 (8) (a) and (b) requires UCAT to prepare an annual report on the following:

(a) how the applied technology education needs of secondary students are being met; and

(b) what access secondary students have to programs offered:
   (i) at college campuses; and

In addition, Public Education is required to prepare an annual report as found in Section 53A-15-202 (5) (a) and (b) of the Utah Code:

(a) how the applied technology education needs of secondary students are being met; and

(b) what access secondary students have to programs offered:
In compliance with the above legislation, Public Education and UCAT have prepared separate reports to be submitted to the Governor and the Education Interim Committee. The Governor’s Office of Planning and Budget and the Office of the Legislative Fiscal Analyst have worked with the two systems to ensure that the data relating to enrollments are consistent. Both the Governor’s Analyst and Legislative Fiscal Analyst have reviewed the report and agree that the reports comply with the legislation.

A review of the enrollment history shows a decrease in secondary enrollments for UCAT in FY 2003 of 21,663 membership hours. However, three regions, Dixie, Mountainland and Southwest experienced growth. Table 1 shows the enrollment history of secondary students in UCAT:

<table>
<thead>
<tr>
<th>Region</th>
<th>FY 1999</th>
<th>FY 2000</th>
<th>Change</th>
<th>% Change</th>
<th>FY 2001</th>
<th>Change</th>
<th>% Change</th>
<th>FY 2002</th>
<th>Change</th>
<th>% Change</th>
<th>FY 2003</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bear River</td>
<td>387,977</td>
<td>383,512</td>
<td>-4,465</td>
<td>-1.15%</td>
<td>383,739</td>
<td>-5.10%</td>
<td>387,942</td>
<td>24,203</td>
<td>6.55%</td>
<td>390,125</td>
<td>(6,177)</td>
<td>-1.70%</td>
<td></td>
</tr>
<tr>
<td>Davis-Morgan</td>
<td>477,231</td>
<td>461,165</td>
<td>-16,066</td>
<td>-3.37%</td>
<td>449,041</td>
<td>-6.25%</td>
<td>495,408</td>
<td>46,367</td>
<td>10.33%</td>
<td>485,999</td>
<td>(9,809)</td>
<td>-1.98%</td>
<td></td>
</tr>
<tr>
<td>Dixie</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>51,612</td>
<td>10.33%</td>
<td>66,441</td>
<td>14,829</td>
<td>28.73%</td>
<td>74,966</td>
<td>8,525</td>
<td>12.30%</td>
<td></td>
</tr>
<tr>
<td>Mountainland</td>
<td>205,319</td>
<td>222,099</td>
<td>16,780</td>
<td>8.17%</td>
<td>237,263</td>
<td>15.16%</td>
<td>335,861</td>
<td>98,598</td>
<td>41.56%</td>
<td>380,511</td>
<td>44,650</td>
<td>12.90%</td>
<td></td>
</tr>
<tr>
<td>Ogden-Weber</td>
<td>313,699</td>
<td>339,242</td>
<td>25,543</td>
<td>8.14%</td>
<td>333,860</td>
<td>-5.94%</td>
<td>332,925</td>
<td>(105)</td>
<td>-0.28%</td>
<td>316,726</td>
<td>(16,199)</td>
<td>-4.87%</td>
<td></td>
</tr>
<tr>
<td>Salt Lake-Tooele</td>
<td>207,201</td>
<td>216,169</td>
<td>8,968</td>
<td>4.33%</td>
<td>134,747</td>
<td>-27.67%</td>
<td>126,513</td>
<td>(8,234)</td>
<td>-6.11%</td>
<td>111,580</td>
<td>(11,933)</td>
<td>-9.80%</td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td>67,752</td>
<td>49,465</td>
<td>-18,287</td>
<td>-26.99%</td>
<td>50,242</td>
<td>777</td>
<td>58,780</td>
<td>8,538</td>
<td>14.91%</td>
<td>45,906</td>
<td>(12,874)</td>
<td>-21.90%</td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td>116,881</td>
<td>112,969</td>
<td>-3,912</td>
<td>-3.35%</td>
<td>68,196</td>
<td>(44,773)</td>
<td>94,450</td>
<td>26,254</td>
<td>28.50%</td>
<td>120,156</td>
<td>25,706</td>
<td>21.22%</td>
<td></td>
</tr>
<tr>
<td>Uintah Basin</td>
<td>193,728</td>
<td>222,634</td>
<td>28,906</td>
<td>14.92%</td>
<td>251,328</td>
<td>28,694</td>
<td>231,303</td>
<td>(20,025)</td>
<td>-8.70%</td>
<td>222,191</td>
<td>(9,112)</td>
<td>-3.94%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,969,788</td>
<td>2,007,255</td>
<td>37,467</td>
<td>1.90%</td>
<td>1,940,028</td>
<td>(67,227)</td>
<td>2,129,623</td>
<td>89,595</td>
<td>4.32%</td>
<td>2,107,960</td>
<td>(21,663)</td>
<td>-1.02%</td>
<td></td>
</tr>
</tbody>
</table>

Note 1: Data for the Central Region will be explained in another table.
Note 2: Data for the Dixie Region for FY 1999 and 2000 was not available because that region was part of the Southwest Region.
Note 3: Data for FY 1999-2001 was before the creation of UCAT.
The FY 2002 and FY 2003 downturn in overall enrollments shown in the above table has two explanations. First, public education experienced a decline in secondary enrollments from FY 2002 to 2003 in all but three regions of the State. The second explanation is due to budget reductions for both UCAT and public education in ATE funding forcing the elimination of some ATE programs. The Analyst looked at the growth since the creation of UCAT. Table 2 illustrates since the creation of UCAT, there has been growth in total secondary enrollments:

<table>
<thead>
<tr>
<th>Region</th>
<th>2001</th>
<th>2003</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bear River</td>
<td>363,739</td>
<td>350,325</td>
<td>(13,414)</td>
<td>-3.69%</td>
</tr>
<tr>
<td>Davis-Morgan</td>
<td>449,041</td>
<td>485,599</td>
<td>36,558</td>
<td>8.14%</td>
</tr>
<tr>
<td>Dixie</td>
<td>51,612</td>
<td>74,966</td>
<td>23,354</td>
<td>45.25%</td>
</tr>
<tr>
<td>Mountainland</td>
<td>237,263</td>
<td>380,511</td>
<td>143,248</td>
<td>60.38%</td>
</tr>
<tr>
<td>Ogden-Weber</td>
<td>333,860</td>
<td>316,726</td>
<td>(17,134)</td>
<td>-5.13%</td>
</tr>
<tr>
<td>Salt Lake-Tooele</td>
<td>134,747</td>
<td>111,580</td>
<td>(23,167)</td>
<td>-17.19%</td>
</tr>
<tr>
<td>Southeast</td>
<td>50,242</td>
<td>45,906</td>
<td>(4,336)</td>
<td>-8.63%</td>
</tr>
<tr>
<td>Southwest</td>
<td>68,196</td>
<td>120,156</td>
<td>51,960</td>
<td>76.19%</td>
</tr>
<tr>
<td>Uintah Basin</td>
<td>251,328</td>
<td>222,191</td>
<td>(29,137)</td>
<td>-11.59%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,940,028</td>
<td>2,107,960</td>
<td>167,932</td>
<td>8.66%</td>
</tr>
</tbody>
</table>

Based on the above table, the secondary enrollments for UCAT have increased in total since the creation of UCAT in September of 2001. However, to adequately determine access and availability, both enrollment and program offerings need to be evaluated.

It should be noted that every secondary student is required to take a minimum of one credit in applied technology education in order to graduate from high school. With a headcount of a little over 141,000 enrolled in high schools throughout the State, many students opt to take only the required basic level ATE courses provided by the high school. Those students interested in applied technology programs may continue their studies through ATE concurrent enrollment or at UCAT campuses.

Table 3 indicates that all secondary ATE students **have access to the basic ATE programs** through either public education or UCAT:
It should be noted that the figures in the above table includes ATE concurrent enrollment data. Also, the total secondary students, enrolled in ATE in public education are unduplicated as far as students that move from one school to another during an academic year.

While all secondary students have access and availability to ATE programs throughout the state, the rural community’s program offerings are limited to the basic ATE programs. Appendix 1, a matrix of program offerings by region indicates that many rural school districts have between four and seven program offerings with little or no access to UCAT. In conjunction with the annual report, UCAT sent out a survey to the 40 school districts requesting information on how UCAT can better serve secondary students. A review of the questionnaire indicates that limited program offering and distance to travel to UCAT campuses reduces the participation of rural school districts in ATE. In addition, the questionnaire requested information on what programs have been inaccessible.

The following were listed:
1. Business Programs;
2. Health Occupations;
3. Diesel and Auto Mechanics;
4. Machining;
5. Carpentry; and
The Analyst recommends that the Legislature may want to consider funding UCAT similar to Public Education’s Necessarily Existent Small Schools (53A-17a-109 of UCA). The additional funding for UCAT is to expand ATE offerings in underserved areas.

The Analyst recommends that ATE concurrent enrollments be separated from academic concurrent enrollments by headcount and credit hours awarded to improve the accuracy of the secondary vocational education enrollment statistics.

Because the new Central Model did not go into effect until July 1, 2003, it is premature to evaluate the maintenance of effort. Appendix 2 shows their ATE offerings by location and the enrollments for both secondary and post secondary students.

There is no specific legislation to ensure access and availability of ATE programs for post secondary students. An evaluation of post secondary enrollments by region based on the total work-age population indicates approximately 11.71 percent of the population is participating in ATE programs statewide. Table 4 shows the post secondary enrollments in relation to the total work-age population:

<table>
<thead>
<tr>
<th>Region</th>
<th>Workage Population</th>
<th>UCAT ATE Enrollments</th>
<th>USHE ATE Enrollments</th>
<th>Higher Ed ATE Total</th>
<th>UCAT % of Workage Population</th>
<th>USHE % of Workage Population</th>
<th>Higher Ed % of Workage Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bear River</td>
<td>62,705</td>
<td>9,170</td>
<td>4,522</td>
<td>13,692</td>
<td>14.62%</td>
<td>7.21%</td>
<td>21.84%</td>
</tr>
<tr>
<td>Central</td>
<td>27,122</td>
<td>0</td>
<td>3,024</td>
<td>3,024</td>
<td>0.00%</td>
<td>11.15%</td>
<td>11.15%</td>
</tr>
<tr>
<td>Davis-Morgan</td>
<td>126,585</td>
<td>7,637</td>
<td>5,333</td>
<td>12,970</td>
<td>6.03%</td>
<td>4.21%</td>
<td>10.25%</td>
</tr>
<tr>
<td>Dixie</td>
<td>41,139</td>
<td>221</td>
<td>4,177</td>
<td>4,398</td>
<td>0.54%</td>
<td>10.15%</td>
<td>10.69%</td>
</tr>
<tr>
<td>Mountainland</td>
<td>194,124</td>
<td>9,013</td>
<td>22,099</td>
<td>31,112</td>
<td>6.44%</td>
<td>11.38%</td>
<td>16.03%</td>
</tr>
<tr>
<td>Ogden-Weber</td>
<td>101,669</td>
<td>7,697</td>
<td>9,733</td>
<td>17,430</td>
<td>7.57%</td>
<td>9.57%</td>
<td>17.14%</td>
</tr>
<tr>
<td>Salt Lake-Tooele</td>
<td>499,000</td>
<td>1,491</td>
<td>32,179</td>
<td>33,670</td>
<td>0.30%</td>
<td>6.45%</td>
<td>6.75%</td>
</tr>
<tr>
<td>Southeast</td>
<td>22,065</td>
<td>2,197</td>
<td>3,443</td>
<td>5,640</td>
<td>9.96%</td>
<td>15.60%</td>
<td>25.56%</td>
</tr>
<tr>
<td>Southwest</td>
<td>22,806</td>
<td>1,894</td>
<td>3,174</td>
<td>5,068</td>
<td>8.30%</td>
<td>13.92%</td>
<td>22.22%</td>
</tr>
<tr>
<td>Uintah Basin</td>
<td>18,168</td>
<td>3,039</td>
<td>552</td>
<td>3,591</td>
<td>16.73%</td>
<td>3.04%</td>
<td>19.77%</td>
</tr>
<tr>
<td>Total</td>
<td>1,115,383</td>
<td>40,904</td>
<td>88,236</td>
<td>129,140</td>
<td>3.67%</td>
<td>7.91%</td>
<td>11.58%</td>
</tr>
</tbody>
</table>

Note 1: USHE Enrollments were annualized to be consistent with UCAT.
Note 2: UCAT ATE Enrollment total is adjusted for unduplicated headcount.

As with secondary students, an evaluation of program offerings along with enrollments is needed to determine if post secondary students have access to ATE program offering. Appendix 1 is a matrix of ATE programs provided by each entity within a region. Unfortunately, there are some counties within the regions with little or no ATE program offerings. Based on the data provided, there seem to be several areas within regions that are underserved. The counties located
within the various regions which appear to have limited or almost no services other than the basic ATE courses offered by public education are as follows:

- Central Region – Juab, Millard, Piute and Wayne Counties
- Davis-Morgan Region – Morgan County
- Mountainland Region – Summit and Wasatch Counties
- Salt Lake-Tooele Region – Tooele County
- Uintah Basin Region – Daggett County

The rural regions of the state have limited access and availability to applied technology education particularly higher level program offerings for job preparation.

<table>
<thead>
<tr>
<th>Recommendation for Access and Availability for Post Secondary ATE Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Analyst recommends that the Legislature may want to consider funding UCAT similar to Public Education’s Necessarily Existent Small Schools (53A-17a-109 of UCA). The additional funding for UCAT is to expand ATE offerings in underserved areas.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>The study encompassed three areas when evaluating the efficiency of ATE programs throughout the State: duplication and overlapping of services; articulation to allow students to move between the systems as seamless as possible; and cooperative partnerships.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Duplication and Overlapping of Services</th>
</tr>
</thead>
<tbody>
<tr>
<td>The current economic trend has forced the educational systems to look for more efficient and economical ways to meet the needs of the students enrolled in both higher and public education. Therefore, collaboration of the delivering entities within a region becomes critical to meet the needs of the students effectively. This study encompasses an evaluation of possible duplication and overlapping of services by the delivering systems.</td>
</tr>
</tbody>
</table>

The issue of duplication and overlapping of ATE programs is addressed in the Utah Code in Section 53B-2a-112 for UCAT as follows:

\[(2) \text{ A college campus shall } \textit{avoid any unnecessary duplication} \text{ of applied technology instructional facilities, programs, administration, and staff between the college campus and other public and higher education institutions.}\]

Duplication and overlapping is also addressed for USHE institutions in Section 53B-16-102 of the Utah Code as follows:

\[(8) \text{ In making decisions related to applied technology curriculum changes, the board shall request a review of the proposed changes by the State Board of Education to ensure an orderly and systematic applied technology education curriculum that } \textit{eliminates overlap and duplication}.\]
of course work with the high schools and the Utah College of Applied Technology.

There are cases where duplication of services may be appropriate. Examples are: industry or student demand, which requires several entities within a region to deliver the same programs; distance between delivering institutions within a region particularly in the rural parts of the State; and serving a different population such as post secondary versus secondary. Appendix 1 is a matrix of ATE programs offered by all entities within a geographic region. The areas marked in dark gray are programs that appear to be duplicative in nature.

The Analyst reviewed the program offerings to determine whether there is duplication of the Associate of Applied Science Degree and the Associate of Applied Technology Degree, as well as vocational certificates offered by both UCAT and USHE institutions. The results of this examination were inconclusive because data was not available at the time of this writing.

<table>
<thead>
<tr>
<th>Recommendation for Duplication and Overlapping of Services</th>
<th>The Analyst recommends that each region document the justification for future degree or certificate offering to avoid unnecessary duplication. This documentation should be available for review by the Governor’s Office of Planning and Budget and the Office of the Legislative Fiscal Analyst.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articulation</td>
<td>One of the key components of efficiency is for the systems providing ATE to provide a seamless transition between institutions through articulation agreements. There are two provisions in the Utah Code relating to articulation of ATE programs. The first relates to UCAT’s AAT degrees in Section 53B–2a–104 (3) of the Utah Code it states the UCAT Board of Trustees should:</td>
</tr>
</tbody>
</table>

\[
\text{ensure that an applied technology education degree is transferable to other higher education institutions in accordance with State Board of Regents rules;}
\]

The second relates to ATE concurrent enrollment for secondary students in Section 53A-15-101 (3) (c):

\[
\text{college credits obtained under this section shall be accepted for transfer of credit purposes as if they had been obtained at any public institution of higher education within the state system.}
\]

There are already articulation agreements in place with public education and higher education for Tech Prep and Concurrent enrollment courses. However, articulation agreements between UCAT, USHE and public education are in the process of being developed. UCAT currently offers three Associate of Applied Technology (AAT) degrees with nine more AAT degrees in the process of being approved. At present, the AAT degrees can only articulate with the Bachelor of Applied Technology (BAT) Degree, which are in the process of being
implemented at Utah Valley State College and Weber State. UCAT follows the Regent’s Policy R 401, which outlines the process for new programs. The process allows higher education institutions to review and make comments on proposed programs. There is some concern associated with the AAT degrees that the USHE institutions are not included in the development of the AAT degrees until the review and comment process. This process is critical to ensure a smooth transition from UCAT to USHE institutions.

**Recommendation for Articulation**

Therefore, it is the recommendation of the Analyst that the educational systems work together on the development of new program offerings including AAT degrees, and articulation agreements in order to create a seamless educational system.

**Partnerships**

Collaborative and cooperative partnerships are vital for the educational systems providing ATE to efficiently and effectively offer vocational training within a region. Appendix 3 outlines the Utah Code Sections relating to partnerships and cooperative agreements.

Examples of current partnerships are as follows:

**Administrative Partnership**

Utah Valley State College, the College of Eastern Utah, Dixie State College, and Iron School District act as the fiscal agents for the UCAT campuses located in their respective regions.

**Partnerships of Facilities, Equipment and Instructors**

Equipment, supplies, instructors, administrative staff and classroom space are shared between the systems eliminating the expense of duplication of classroom, equipment, facilities and personnel.

UCAT provides space for Public Education to offer English as a Second Language and other Adult Education programs.

Dixie Applied Technology Campus is located in space owned by Dixie State College.

Dixie State College allows UCAT to utilize their Dental Hygiene Clinic for their Dental Assisting Program.

Mountainland Applied Technology Campus and Utah Valley State College share the Dental Lab located at Mountainland for Dental Assisting and Dental Hygiene Programs.

Alpine School District relocated the Automotive Technology Program including the equipment and faculty from American Fork High School to Mountainland Applied Technology Campus to serve secondary students from several high schools in the district.
Mountainland Applied Technology Campus is in space owned by Utah Valley State College.

Utah Valley State College and Mountainland will share the facilities at the Wasatch campus located in Heber to serve students in that area of the State. Wasatch School District is transferring their automotive department to the new Wasatch Campus located in Heber.

Salt Lake-Tooele Applied Technology Campus is sharing a facility with Workforce Services to connect two entities with interrelated missions to offer “One-stop” employment services.

Salt Lake-Tooele Applied Technology Campus leases space from West Valley Truck Center allowing students to use their equipment for diesel mechanics eliminating the expense of procuring expensive equipments.

Salt Lake-Tooele Applied Technology Campus is also located in an old elementary school provided by Granite School District.

Southwest Applied Technology Campus shares a facility with the Southwest Education Academy.

Southwest and Dixie Applied Technology Campuses have a cooperative agreement to share facilities, instructors and equipment for several programs including the Professional Truck Driving Program eliminating the expense of duplication.

Utah State University and the Uintah Basin Applied Technology Campus plan to jointly share a facility in Vernal.

Weber State University offers health science programs as well as articulation agreements with Davis, Ogden-Weber, Uintah Basin Snow College and Southern Utah University.

Mountainland Applied Technology Campus (MATC) entered into a Memorandum of Understanding with a private cosmetology school to accept 20 students with a $3,000 scholarship ($1,500 from the private school and $1,500 from MATC) rather than duplicate services.

Southeast Applied Technology Campus has cooperative agreements with Workforce Services, the Department of Vocational Rehabilitation, the College of Eastern Utah, all of the school districts located in their region, and Ute Indian Tribe to offer ATE.
The Oracle Academy is a partnership between Uintah Basin Applied Technology Campus and the Uintah River Technologies which is a company owned by the Ute Indian Tribe.

Basically, the regions that created successful partnerships when UCAT was under Public Education, continue to be successful and the areas that struggled before UCAT, continue to have challenges. The regions that are the most effective at offering applied technology education do so because of strong communication between the delivering systems and cooperative participation in designing regional plans for applied technology education within the region.

### Recommendation for Partnerships

The Analyst recommends that the Utah System of Higher Education, Public Education and the Utah College of Applied Technology continue to work together to develop regional plans to meet the needs of vocational students without creating unnecessary program duplication.

### Conclusion and Recommendations

#### Access and Availability

1) Access and availability of entry level ATE courses are available to all secondary students however, the rural secondary students do not have access to upper level ATE programs. Adults in the rural communities have limited access to any ATE programs. The Analyst recommends that the Legislature may want to consider funding UCAT similar to Public Education’s Necessarily Existent Small Schools (53A-17a-109 of UCA). The additional funding for UCAT is to expand ATE offerings in underserved areas.

2) The Analyst recommends that ATE concurrent enrollments be separated from academic concurrent enrollments by headcount and credit hours awarded to improve the accuracy of the secondary vocational education enrollment statistics.

#### Efficiency

3) There does not appear to be a significant amount of duplication. In several instances, entities were providing the same programs due to industry and student demand for the health sciences programs. Of concern is the instance where UCAT and USHE are offering what appears to be the same certificate or AAT/AAS degree without adequate documentation to support the duplication. The Analyst recommends that each region document the justification for duplication of degrees or certificates within a region. This information should be available for review by the Governor’s Office of Planning and Budget and the Office of the Legislative Fiscal Analyst.

4) Articulation of programs between the systems encourages a seamless educational system and ensures that students move from one school to the next as efficiently as possible. The systems have started the process of drafting articulation agreements. One concern is that the USHE institutions
are not involved in the development of the AAT degrees with UCAT. In order to facilitate the articulation process, the ATE directors from UCAT and the USHE institutions need to work together in the creation of the AAT degrees. The Analyst recommends that the educational systems work together on the development of new program offerings including AAT degrees, and articulation agreements in order to create a seamless educational system.

5) Finally, partnerships between Public Education, UCAT, USHE and business and industry are a key component to the success of ATE program offerings throughout the state. The regions that have been the most successful have a proven track record of working cooperatively together to offer applied technology education. The Analyst recommends that the Utah System of Higher Education, Public Education and the Utah College of Applied Technology continue to work together to develop regional plans to meet the needs of vocational students without creating unnecessary program duplication.
Appendix 1
Appendix 2
Appendix 3
The Utah Code outlines many areas where the systems are to work cooperatively to provide ATE. For example, Public Education’s Code sections relating to cooperation is as follows:

53A-15-101 (b)  
*a program of selected college credit courses in general and applied technology education which would be made available in cooperation with the State Board of Regents, as resources allow, through concurrent enrollment with one or more of the state's institutions of higher education;*

53A-1-402 (4)  
(a) The board shall authorize the Utah College of Applied Technology Board of Trustees to develop and submit a competency-based high school diploma proposal to the board.  
(b) The board shall grant final approval before the Utah College of Applied Technology offers the diploma.

-53A-15-202 (4)  
*shall cooperate with the Utah College of Applied Technology to ensure that students in the public education system have access to applied technology education at Utah College of Applied Technology campuses;*

UCAT also has language in the Utah Code relating to cooperation:

53B-2a-110 (1)  
(b) after consulting with the Utah College of Applied Technology, other higher education institutions, and local school districts within its region, prepare a comprehensive strategic plan for delivering applied technology education within its region;  
(c) consult with business, industry, the Department of Workforce Services, and the Governor's Office of Planning and Budget on an ongoing basis to determine what workers and skills are needed for employment in Utah businesses and industries;  
(l) coordinate with local school boards and districts to protect the applied technology education needs of secondary students; and  
(m) develop policies and procedures for the admission, classification, instruction, and examination of students in accordance with the policies and accreditation guidelines of the Utah College of Applied Technology, the State Board of Education, and the State Board of Regents.

53B -2a-112  
(3) A college campus may enter into agreements: (a) with other higher education institutions to cultivate cooperative relationships;
(b) with other public and higher education institutions to enhance applied technology education within its region;

(4) Before a college campus develops its own new instructional facilities, it shall give priority to:

(b) coordinating with the president of a higher education institution and entering into any necessary agreements to provide applied technology education to both secondary and adult students that:

(c) developing cooperative agreements with local school districts, other higher education institutions, businesses, industries, and community and private agencies to maximize the availability of applied technology instructional facilities for both secondary and adult students.

6) Before acquiring new fiscal and administrative support structures, a college campus shall:

(a) review the use of existing public or higher education administrative and accounting systems, financial record systems, and student and financial aid systems for the delivery of applied technology education in the region;

(b) determine whether it is feasible to use those existing systems;