Annual Report to the LCCC Board of Trustees
Program Review Activity for the 2014-2015 Cycle (December 2, 2015)

Executive Summary

INTRODUCTION
This is the first LCCC Program Review Annual Report that procedure 10.2P directs be generated annually by the Department of Institutional Effectiveness. It is comprehensive, especially in this first rendering, as to establish a foundational record of beginning for the College to scale up a systematic approach for continuous improvement.

ALIGNMENT OF THE PROGRAM REVIEW PROCESS TO THE BOARD OF TRUSTEES POLICY 10.2
The Board of Trustees have identified Academic program review as the primary mechanism to assess program quality, facilitate program improvement and development, measure student learning outcomes, and inform continuous improvement, while advancing growing alignment and integration of processes. The College's current program review process aligns with the Board's program review objectives.

PROGRAM REVIEW'S ROLE IN THE COLLEGE'S PARTICIPATION IN AQIP
The College's self-study template for both academic and non-academic programs replicates the AQIP design for the practice of continuous improvement and places heavy emphasis on program descriptions of the self-evaluation methods used to reveal process performance. Emphasis is also placed on having programs identify improvements that originated from data-informed decision making. Adding some credibility to this program review design, AQIP peer-reviewers recently recommended that the College submit proposals at the next Higher Learning Commission annual meeting that provide wider visibility for this approach.

FACULTY AND STAFF PARTICIPATION IN THE 2014-2015 PROGRAM REVIEW PROCESS
Overall, 44 faculty and staff participated in program review activities, some as program leaders (14) developing self-studies and many more serving as peer reviewers (30) who evaluated the self-studies. During their interactions, these staff and faculty communicate back and forth online and form dialogues about quality in processes that programs use to achieve their mission, attain their values, and achieve their objectives. During March 2015 this program review cycle generated 635 peer-review feedback comments and 230 program responses. Each program response represents a dialogue among faculty and staff about process performance and program quality.

IMPACT OF INTEGRATING KPI'S INTO THE PROGRAM REVIEW PROCESS
The College operationalizes its KPI measures as a continuous improvement resource by integrating four groupings of measures—participation, student success, learning environment, and efficiency— into three sections of the self-study template. A tracking of nine programs across the four KPI sections revealed an even performance on participation, a stronger performance on student success and learning environment, and overall weaker program performance on efficiency.

SUMMARIES OF THE SELF-STUDY SECTIONS
Program Performance on Knowledge Distribution
Programs performed better in this section than in organizational effectiveness and planning. Some credit may go to the corresponding emphasis placed on curriculum redesign. Programs took advantage

of their newly developed program sequenced degree/certificate plans and uploaded them to this area. In addition, some programs were able to discuss relationships between course learning competencies and program level learning competencies as a result of completing course MCOR forms; they uploaded them to the self-study.

<u>Program Performance on Organizational Effectiveness</u>
Previous program reviews did not offer a systematic evaluation of programs' efficiency outcomes. This program review process revealed that most programs lacked historical experience with developing measures or valued indicators that would reveal how efficiently they operated. Most programs did not include time-trend data to demonstrate growing or diminishing efficiency over time.

<u>Program Performance on Planning: Action Plan Goal Activity</u>
Overall, programs developed 21 action plan goals for an average of 2.1 per program. The relatively low planning activity is likely a result of the long period of institutional inactivity in meaningful program-level action planning, especially as a result of program review. There is little evidence showing that a systematic infrastructure for developing planning with regular peer review scrutinizing the quality of planning and the attainment of goals was established until recently.

As a result, programs' weakest performance in this first cycle of program review occurred in the planning section. Programs generally did not link their planning with stakeholder needs. Rarely did they discuss the integration of their planning or relate it to their school's planning or with the College's strategic planning. Few references appeared in the self-studies about how well action plan goals were shared with Deans, Chairs, and advisory boards, albeit more mention was made of advisory boards. In the improvement section on planning, few programs recognized their own new planning efforts, such as their multiple goals appearing in annual assessment planning and their newly developed action plan goals, as improvements in planning capacity. This failure to recognize their own recent experience in planning indicates that this activity may still be an abstract exercise.

<u>Capacity for Future Success</u>
Many programs did surprisingly well in this section. Their discussions on resiliency and resource growth indicated deep reflection on the part of program leaders and demonstrated a confident resourcefulness.

ALIGNMENT OF ACTION PLAN GOALS TO LCCC STRATEGIC PLANNING
The 2014-2015 review process resulted in 21 action plan goals. While just six of ten programs linked ten action plan goals to eight strategic planning strategies, the effort represents a beginning baseline activity. Eight of ten strategies relate to Goal One: Completion Agenda for the 21st Century.

CONCERNS IDENTIFIED WITH THE NEW PROGRAM REVIEW PROCESS
Several programs had difficulty recognizing that the specific data results reporting sections along with self-study discovery and improvements sections were specific to the areas where they were located. The 2015-2016 program review template provides added clarity that programs are to provide distinct discussions about knowledge distribution data/improvements, organizational effectiveness data/improvements, and planning data/improvements.

Another concern that was raised by at least two programs relates to the low level of expertise programs share with respect to the identification, organization, analysis, and reporting of data. In response, the

Department of Institutional Effectiveness has begun offering workshops and in-service concurrent sessions on program-level data development. This effort began formally during fall in-service and was reinforced during Faculty Connections (advising day) on November 3 with a full day workshop involving all faculty from the four schools. The training included how to use IR's new single-page data resources table (accessible in Eagles Eye and Aquila). Faculty now have a tool to help them access KPI program analysis data as well as rubric scoring data on institutional student learning competencies extracted from D2L. Recent access to the Best Practices Locator for program review at the I.E. virtual office (Eagles Eye) adds another resource for future program leaders who will be preparing program review self-studies.

IMPROVEMENTS MADE TO THE PROGRAM REVIEW PROCESS
The 2015-2016 self-study template underwent multiple changes as a result of lessons learned. As mentioned earlier, the Knowledge Distribution, Organizational Effectiveness, and Planning sections include more effective instructions to ensure a reduction in duplication of information. Added clarity in assumed practices descriptions was provided for multiple sections. Inter-rater reliability training will be strengthened for the reviewer orientations held in early 2016. The next cycle also places more emphasis on completing curriculum maps as a part of the program review experience.

QUALITY OF REVIEWER FEEDBACK AND SCORING OF THE PROGRAM REVIEW RUBRIC
Generally, the Program Review Subcommittee members scored evenly across programs and within sections of the scoring rubric. Initially, in February 2015 attention was given to inter-rater reliability to reduce large variances in scoring, and this produced consistent scoring.

The Academic Standards Subcommittee for Program review worked through a two-phase review period, three months in spring 2015 to evaluate Phase One programs and three months in fall 2015 to evaluate Phase Two programs. This placed a high burden on evaluators. This report strongly recommends that leadership apply program accountability to ensure that self-studies are completed in the time frame described in the College procedure 10.2P.

CONCLUSION
As mentioned above, the lack of research planning infrastructure and low planning activity during the past decade or longer emerges as a primary cause of the low self-evaluation capacity and development of data-driven improvements. The comfort with and the knowledge of how to use data for improvement is difficult to attain without the reasoning and structure to attain it (systematic planning and documentation). As the AQIP Systems Appraisal Feedback report states, the College will need to support the continuous improvement processes it has designed and sustain the discipline the report suggests it will need to achieve growing maturity in continuous improvement. The program review process has begun, and the faculty effort to engage this process has been remarkable during its first year of implementation. This initial showing of discipline will require continued reinforcement from leadership, including references to it as a valued activity that deserves a significant time commitment. This discipline exercised over time promises to develop an institution that will fulfill the hopes and dreams of current and future students.

Full Report

INTRODUCTION

This is the first LCCC Program Review Annual Report that procedure 10.2P directs be generated annually by the Department of Institutional Effectiveness. It is comprehensive, especially in this first rendering, as to establish a foundational record of beginning for the College to scale up a systematic approach for continuous improvement. It forms multiple baseline measures and program performance descriptions that will inform future report analysis. Included is an overall description of program review output and executive summaries of all program reviews for 2014-2015 that appear in Appendix B. Normally this report is to be submitted to the Board in the fall. However, the first cycle of program review coincided with the institution's roll out of the curriculum redesign project. The added campus activity delayed the development of self-studies, extending the program review process into fall 2015 (November) and necessarily delaying this annual report until December 2015.

ALIGNMENT OF THE PROGRAM REVIEW PROCESS TO THE BOARD OF TRUSTEES POLICY 10.2

The Board of Trustees have identified Academic program review as the primary mechanism to assess program quality, facilitate program improvement and development, measure student learning outcomes, and inform continuous improvement, while advancing growing alignment and integration of processes. The College's current program review process aligns with the Board's program review objectives as shown in Appendix A. The Board's four program review objectives are:

> A. Generate meaningful knowledge about how well academic programs are contributing to the attainment of the College's mission;
> B. Provide for regular evaluation of each academic program with enough frequency to establish a cycle of planning and assessment for continuous improvement;
> C. Incorporate objective input, process, and outcomes components to provide a holistic perspective of programs' current efficacy and guide planning for improvement; and
> D. Lead to the development of actionable and appropriate plans for program improvement.

Annually, the results of the current year's program reviews should be provided to the Board of Trustees in enough detail to ensure the process the President deploys for academic program review meets these objectives.

PROGRAM REVIEW'S ROLE IN THE COLLEGE'S PARTICIPATION IN AQIP

The Higher Learning Commission (HLC) peer-reviewers evaluated LCCC's System's Portfolio and delivered a Systems Appraisal Feedback Report in February 2015. The reviewers provided the Institution with maturity ratings of "systematic" for most of the College's operational process descriptions but rated the institution at the lower level of "reacting" for capacity to evaluate those processes and develop data showing the performance of College processes. In addition, the reviewers rated the Institution's capacity to identify data-driven improvements and consistently use data-driven decision-making at the "reacting" level. In other words, the College's new program review process is rated as systematic, but there is no evidence to support its effectiveness and no improvements to the process have been identified based on stakeholder feedback or data analysis. This example holds for most processes at the institution.

Fortunately, the College's self-study template for both academic and non-academic programs replicates the AQIP design for the practice of continuous improvement and places heavy emphasis on program descriptions of the self-evaluation methods used to reveal process performance. Emphasis is also placed on having programs identify improvements that originated from data-informed decision making. Adding some credibility to this program review design, AQIP peer-reviewers recently recommended that the College submit proposals at the next Higher Learning Commission annual meeting that provide wider visibility for this approach.

Additionally, repeated in-service workshops and CTL sessions that help faculty and staff members learn how to build program and process self-evaluation skills will play a role in strengthening LCCC's continuous improvement maturity. Also playing a role will be the annual assessment planning in the areas of student learning and program operational effectiveness. Both assessment and program review utilize internal peer-review, which is used to strengthen organizational learning for continuous improvement through participation. Finally, a strategic plan strategy could be developed in the refresh exercise that would guide the institution towards a comprehensive focus on developing self-evaluation capacity for all areas on campus. The program review annual report data can be used as a measuring stick for maturity progress.

FACULTY AND STAFF PARTICIPATION IN THE 2014-2015 PROGRAM REVIEW PROCESS
The Academic Program Review Procedure (10.2P) requires Deans to appoint program leaders to organize self-studies for programs under review. Fourteen faculty members developed ten self-studies for this cycle and responded to peer-review comments (see Table 3). In addition, Academic Standards Committee Procedure (2.12 P) defines the peer review subcommittee structure that leads the evaluation role for LCCC program review (see Table 4). This subcommittee included a group of fifteen formal, full-time faculty and staff members and fifteen part-time faculty members who are assigned program reviews in 2015-2016. The part-time faculty members have lower workloads and are participating in order to gain experience that will facilitate their preparations of program review self-studies during the next cycle. Overall, 44 faculty and staff participated in program review activities. During their interactions, these staff and faculty talk back and forth online and form dialogues about quality in processes that programs use to achieve their mission, attain their values, and achieve their objectives. Examples of dialogues appear in the executive summaries for Medical Diagnostic Sonography and Paralegal (see Appendix B). During March 2015 this program review cycle generated 635 peer-review feedback comments and 230 program responses. Each program response represents a dialogue among faculty and staff about process performance and program quality. Often when a program generates a single response, it is providing information that corresponds to two or three faculty reviewer feedback comments listed in a self-study section. The 230 dialogues resolve many of the questions and express most observations before the April face-to-face meetings occur.

In addition to the online dialogues, program leaders meet face-to-face near the end of the program review process to have discussions about hard-to-solve problems, questions left without appropriate program responses, suggestions for strengthening action plan goals, and other topics that program leaders or peer reviewers want to present. The high level of faculty and staff interaction contributes directly to organizational learning, the diffusion of ideas and methods, which is one of the objectives of the College's program review process. Overall, the institution's assumed practices, which are an expression of the College's values, were being communicated to and interpreted by 44 faculty and staff who represented four colleges and multiple Cabinet VP areas.

Table 3 Academic Program Review Schedule, 2014-2015		Review Feedback Comments	Program Responses
Programs	**Program Leaders (14)**		
1. Art (AA)	Ron Medina and Daniel Maw	62	31
2. Automotive Technology (AAS) (Cert)	Dave Curry and Robert LaFaso	39	5
3. Computer Science (AS)	Rob VanCleave	93	33
4. Diagnostic Medical Sonography (AAS)	Adrienne Wade and Sheridan Hanson	109	43
5. History (AA)	Mary Ludwig and Patty Kessler	42	18
6. HVAC (AAS) (Cert)	Dave Curry and Rob McNabb	46	0
7. Music (AA)	Judy Ransom	55	31
8. Paralegal (AAS) (Cert)	Jodi Weppner	58	33
9. Paramedics (AAS) (Cert)	Patrick Currie	77	36
10. Welding (AAS) (Cert)	Dave Curry and Sam Graham	54	0
Totals for 2014-2015		635	230

Table 4 Academic Standards Program Review Subcommittee (30), 2014-2015	
1. Faculty Member-Arts & Humanities	Damien Kortum (Nicole Bryant to assist)
2. Faculty Member-Business	DeeJaay Beals
3. Faculty Member-Health Sciences	Robin Duncan and Starla Mason
4. Faculty Member-Math & Sciences	Michele Albert
5. Academic Dean	Melvin Hawkins
6. Academic Dean	Karen Lange
7. VPAA	Jose Fierro and Terry Harper
8. AVP Institutional Effectiveness & Chair	Kim Bender
9. Chair of the SLA Committee	Kari Brown-Herbst and Melissa McAllister
10. Student Services Representative	Julie Gerstner
11. Administration and Finance Representative	Herry Andrews
12. One Librarian	Meghan Kelly
Faculty Members With a Role in Developing Next Year's 2015-16 Program Review	
Note: The below-listed Part-Time faculty members will review only one program review self-study to gain experience with the LCCC program review process that will be used for their reviews in 2015-2016.	
a. Accounting	Jeri Griego or Denise Rogers
b. Business Administration	Jeff Shmidl or Jeri Griego
c. Business Management	Jeff Shmidl or Jeri Griego
d. Computer Information Systems	Rob VanCleave
e. Diesel Technology	Seth Robbins or Larry Van Why
f. Education	Scott Moncrief
g. English	Damien Kortum
h. Homeland Security	James Burghard
i. Biology (Natural Science)	Clint Reading
j. MMMM (Mass Media)	J. O'Brien
k. Nursing	Jennifer Anderson
l. Physical Therapist	Sarah Hughes, Celeste Hooper
m. Wind Energy	Bryan Boatright

COMPARATIVE DATA ON PROGRAM PERFORMANCE AT THE COURSE LEVEL

This section displays Table One that includes aggregated totals for course details data on ten programs for a comparative description of performance. Data such as these and KPIs are posted in programs' self-studies to encourage faculty members to conduct evaluative analyses of performance.

Table 1 Course Details for Three Academic Years (2011-12 / 2012-13 / 2013-14)							
Row Labels	# active sections	FTE	Census Headcount	Ending Headcount	Fill Rate	Retention Rate	Success Rate
Art							
Grand Total	227	6,352.00	2166	2049	51.23%	94.60%	79.77%
Automotive Technology							
Grand Total	39	2,152.00	645	635	105.39%	98.45%	89.61%
Computer Science							
Grand Total	117	6,407.00	2027	1773	79.90%	87.47%	61.52%
Diagnostic Sonography							
Grand Total	63	1,328.00	430	430	95.56%	100.00%	100.00%
EMS Paramedics							
Grand Total	37	1,589.00	405	395	56.25%	97.53%	97.53%
History							
Grand Total	155	778.17	3115	2717	74.36%	87.22%	61.84%
HVAC-R							
Grand Total	48	563.00	262	247	35.99%	94.27%	77.05%
Music							
Grand Total	311	4,134.00	2416	2230	27.97%	92.30%	80.45%
Paralegal							
Grand Total	53	1,119.00	371	347	33.88%	93.53%	86.25%
Welding							
Grand Total	9	490.00	140	135	100.00%	96.43%	83.57%

IMPACT OF INTEGRATING KPI'S INTO THE PROGRAM REVIEW PROCESS

The College operationalizes its KPI measures as a continuous improvement resource by integrating four groupings of measures—participation, student success, learning environment, and efficiency— into three sections of the self-study template. If programs do not discuss their mitigation efforts to raise low KPI measures or their reinforcement of processes earning high measures, the reviewers ask them to expand discussion. If program responses are ineffective, programs will be required to provide follow-up reports on the identified KPI sections. Detailed KPI reports for individual programs are available in programs' executive summaries in Appendix B.

The History program commented on its exposure to KPIs in the program review process.

KPIs are generated by the Office of Institutional Research. Until the History faculty engaged in a program review, the KPIs that were being generated and considered were unknown to the faculty. The History faculty are concerned that program faculty do not have prior knowledge to how they, their classes, and their students are being evaluated at an institutional level.

Table 2 shown below displays a clustering of nine programs across the four KPI sections that reveals an even performance on participation, a stronger performance on student success and learning environment, and overall weaker program performance on efficiency.

Table 2

Summary of KPI Average Scores

Scoring Quintiles (1 is lowest, 5 is highest)	5	4	3	2	1
A. Participation	History	Art Computer Science Music	Automotive Tech	EMS Paramedics Paralegal	Medical Sonography HVAC-R
A.1 Annual FTE (KPI A.1.a) A.2 Number of "participants" enrolled (KPI A.1.b) A.3 Number of "concentrators" enrolled					
B. Success		Automotive Tech Medical Sonography EMS Paramedics Paralegal	Computer Science Music	Art History HVAC-R	
B.1 Course success rate (KPI A.7) B.2 Graduation rate for "concentrators" (KPI A.4) B.3 Number of Associates and workforce degrees/certificates awarded (KPI C.2.a, D.2.a) B.4 Number of "concentrators" matriculating to university (KPI C.3) B.5 University matriculation rate (KPI C.3)					
C. Learning Environment		Automotive Tech Computer Science EMS Paramedics	Medical Sonography History HVAC-R Music	Art	Paralegal
C.1 Percent of sections taught by full-time faculty (KPI F.3.a) C.2 FTE student to FTE faculty ratio (KPI F.2)					
D. Efficiency		History	Automotive Tech Computer Science Medical Sonography EMS Paramedics	Art HVAC-R Music Paralegal	
D.1 Average credits to completion (KPI F.1.a) D.2 Average time to completion (KPI F.1.b) D.3 Average section fill rate (KPI F.4) D.4 Core expenditures per FTE (KPI G.1)					

*Welding: N/A No historical information

SUMMARIES OF THE SELF-STUDY SECTIONS

Program Performance on Knowledge Distribution
Programs performed better in this section than in organizational effectiveness and planning. Some credit may go to the corresponding emphasis placed on curriculum redesign. Programs took advantage of their newly developed program sequenced degree/certificate plans and uploaded them to this area. In addition, some programs were able to discuss relationships between course learning competencies and program level learning competencies as a result of completing course MCOR forms; they uploaded them to the self-study. Programs offering general education courses also benefitted from recent exercises in meeting Academic Standards requirements for qualifying courses in this category. The recent emphasis on establishing articulation agreements with the University of Wyoming also strengthened program descriptions and documentation in the curriculum alignment self-study section; however, descriptions of program alignment and engagement with high schools was less developed.

Most programs struggled with describing how their curriculum systematically generated added learning rigor and complexity as students progressed through the program. Programs often identified their stakeholders but rarely provided evidence of stakeholder feedback that directly contributed to changes and improvements to the curriculum or instruction over time. With the exception of Health Science programs, little evidence of learning research (program surveys, graduate exit surveys, student course surveys, rubric results, end-of-program exam results, certification results or others) was provided.

Program Performance on Organizational Effectiveness
Previous program reviews did not offer a systematic evaluation of programs' efficiency outcomes. This program review process revealed that most programs lacked historical experience with developing measures or valued indicators that would reveal how efficiently they operated. Most programs did not include time-trend data to demonstrate growing or diminishing efficiency over time. For example, programs like Automotive Technology and Welding purchase significant amounts of product but offer little analysis of how well their buying processes were working to reduce or optimize spending. Few programs annually analyzed their student fees to ensure they were set at appropriate levels to match expenditures. As best practices emerge in this section and other low-performing sections, programs will begin to share learning on these activities.

Programs also performed poorly on how they evaluate the quality of resources. Only one program (Medical Diagnostic Sonography) regularly used a survey of resources to learn from students about the adequacy of resources: personnel, physical (space, equipment, ventilation, lighting), learning (tutors, computer labs), and clinical.

Program Performance on Planning: Action Plan Goal Activity
Overall, programs developed 21 action plan goals for an average of 2.1 per program. One of the Board's expectations of the institution's program review process is that it encourage the development of actionable and appropriate plans for program improvement. Some programs have developed only one action plan goal, which does not match institutional expectations. The low planning production will be addressed with the Academic Standards Committee assignment of follow-up reports, which will emphasize the development of additional action plan goals as the means to strengthen underdeveloped performance areas. Over the winter months, programs have Aquila access to continue adding more

action plan goals to their self-studies. In addition, assumed practices for 2015-2016 have been adjusted upward to expectations for a minimum of three action plan goals per program.

The relatively low planning activity is likely a result of the long period of institutional inactivity in meaningful program-level action planning, especially as a result of program review. There is little evidence showing that a systematic infrastructure for developing planning with regular peer review scrutinizing the quality of planning and the attainment of goals was established until recently. The year off from program review (2013-2014) further delayed capacity building for institutional planning.

As a result, programs' weakest performance in this first cycle of program review occurred in the planning section. Programs generally did not link their planning with stakeholder needs. Rarely did they discuss the integration of their planning or relate it to their school's planning or with the College's strategic planning. Few references appeared in the self-studies about how well action plan goals were shared with Deans, Chairs, and advisory boards, albeit more mention was made of advisory boards. In the improvement section on planning, few programs recognized their own new planning efforts, such as their multiple goals appearing in annual assessment planning and their newly developed action plan goals, as improvements in planning capacity. Nor did programs discuss their new assessment planning and action goals in the final sections on future capacity to succeed. Reviewers frequently reminded programs to mention their new planning efforts in these self-study sections, and this occasionally resulted in program acknowledgement when developing their responses to review comments. This failure to recognize their own recent experience in planning indicates that this activity may remain an abstract exercise until deans or chairs regularly require annual or regular reporting on planning progress. Already, the college requires annual peer review of assessment planning, but the monitoring of program follow up is still new in its development. Planning activity and documentation of its attainment with analyses of strategy performance would support the HLC accreditation criteria that relate to the strength of institutional planning and the presentation of meaningful evidence showing how well an institution achieves its goals (5.C. The institution engages in systematic and integrated planning). Evidence documented in this program review self-study begins a formal record on how some programs performed with respect to goal attainment.

Capacity for Future Success
Many programs did surprisingly well in this section, the only self-study section to average above three in the Program Review Rubric. Faculty discussions on resiliency and resource growth indicated deep reflection on the part of program leaders and demonstrated a confident resourcefulness. Program discussions on change management were less convincing as the institution's capacity to plan and self-evaluate systematically is still emerging.

DISCOVERY: STRENGTHS, OPPORTUNITIES, AND CONCERNS
The ten programs demonstrated considerable variation among their descriptions of discovery. See the executive summaries for extensive listings. Discovery items demonstrating some commonality among programs include the following.

Strengths
Dedicated faculty committed to student success
Institutional support for programs, including student fees
Program interaction with the Cheyenne community for presenting events and performances

Serving large numbers of students and high participation in general education course production
Articulation with the University of Wyoming
Sustaining program accreditation
Student success in the workplace (employment)
Expansion of clinical sites

Opportunities
A new fine arts building
Demand for graduates of the program
Stronger evaluation capacity

Concerns
Low enrollment
Clinical site availability

ALIGNMENT OF ACTION PLAN GOALS TO LCCC STRATEGIC PLANNING
Effective planning integration can contribute to the leveraging of human effort that results in a multiplier effect on LCCC strategies. For example, the more times programs develop an action plan goal that supports a specific LCCC strategy (e.g., New Academic Programs), the more human effort there is being systematically applied to that strategy. The more planning programs do, the more direction there is for human effort. After three to four years of tracking, this section will become more meaningful.

The 2014-2015 review process resulted in 21 action plan goals (see Appendix C). The Aquila reporting tool provided the below description of planning alignment for goals. While just six of ten programs linked ten action plan goals to eight strategic planning strategies, the effort represents a beginning baseline activity. Eight of ten strategies relate to Goal One: Completion Agenda for the 21st Century. Currently Goal One is attracting most of the distribution of human effort through action planning. Action planning also serves as a resource for the new Institutional Projects Coordinator who will work to assist programs in completing projects related to action plan goals. Assumed practices will be revised to include project management as a desired characteristic of long-term planning.

GOAL 1.A.i: Target Populations
Target populations in the community that are under-represented in the LCCC student body.
> **Related Items**
> **1. Program Review HVAC-R: Action Plan Goal: Establish an Evaluation Process that Informs Curriculum**
> **Development**
> **Description of Goal**
> The goal of the HVAC/R Program is to establish an evaluation process that informs a development of the curriculum so that it can change with community requirements and new technologies. This will ensure students receive relevant skills to remain competitive in the workforce.
>
> **2. Program Review Welding: Implement a New Program (two credit diplomas)**
> **Description of Goal**

The goal of the Welding Technology is to implement a new program that will better prepare the students for employment with the industry of today, and to monitor and evaluate for continued improvement.

GOAL 1.A.ii: Recruitment Activities
Implement recruitment activities that seek to enroll young adults, especially those with some college, but no degree.

Related Items
1. Program Review Automotive Technology: Goal: Maintain Accreditation
Description of Goal
The primary goal of the Automotive Technology program is to maintain ASE/NATEF Accreditation. This accreditation provides a national view of the educational needs of students within the field of automotive technology.

GOAL 1.A.iii: New Academic Programs
Design and launch new academic programs aligned with current or emerging community, state, or national needs.

Related Items
1, Program Review Welding: Implement a New Program (two credit diplomas)
Description of Goal
The goal of the Welding Technology is to implement a new program that will better prepare the students for employment with the industry of today, and to monitor and evaluate for continued improvement.

2. Program Review Medical Diagnostic Sonography: Program Goal Three: Expand Program Offerings to Vascular
Description of Goal
Expand program offerings into a vascular certification online

GOAL 1.B.iii: Academic Plan on File
Implement a system to ensure all students have an academic plan on file by the end of their first term and reviewed frequently that maps their coursework and milestones from start of their education journey to completion.

Related Items
1. Program Review Paralegal: Program Review Action Goal--5 year cycle - Increase Completion Rates
Description of Goal
The Paralegal program's 5 - year action goal is to increase completion rates in both the A.A.S. and post-baccalaureate Certificate option. As a strategy, the program will closely monitor course scheduling for optimum student availability and to meet the requirements of completion of the program in either three or four semesters depending on the students program option.
According to the Bureau of Labor Statistics, the employment of paralegals or legal assistants is projected to grow 17% from 2012 to 2022. This goal will enable LCCC to continue to provide well prepared and educated graduates to meet this projected need in the paralegal career.

GOAL 1.D.iii: Academic Programs Redesign
Completely redesign our academic programs so that college ready, full-time students would be able to complete certificate programs in one year, and associate degrees in two years.

Related Items
1. Program Review Paralegal: Program Review Action Goal- 5 year cycle - Curriculum Redesign
Description of Goal
The Paralegal program's second 5 - year action goal is to explore redesigning the curriculum of the Paralegal program to better meet the needs of graduates and employers. According to the Bureau of Labor Statistics, the employment of paralegals or legal assistants is projected to grow 17% from 2012 to 2022. This goal will enable LCCC to continue to provide well prepared and educated graduates to meet this projected need in the paralegal career.

GOAL 1.F.ii: Establish Program Learning Outcomes
Establish program learning outcomes for all programs leading to a degree or certificate from LCCC, and establish rubrics and assessments to ascertain achievement of program outcomes.
Related Items
1. Program Review Art: Program Review Action Goal--5 year cycle, Art Department institutional and program competencies
Description of Goal
Continued consistent collection and analysis of institutional competency data.

GOAL 2.B.i.: Establish Program Articulation Agreements
Establish program articulation agreements with four-year institutions that map the entire degree program sequence that illustrates a coherent pathway to a bachelor's degree and guarantees seamless transfer if students adhere to the pathway.
Related Items
1. Program Review Art: Program Review Action Goal--5 year cycle, Art Department articulation
Description of Goal
Maintain and continuing articulation with regional accredited institutions. Continue participation in the WICHE Passport Program to expand articulation to other participating national institutions.

GOAL 4.A.iii.: New LCCC Fine and Performing Arts Building
Initiate planning updates, form community advisory groups, and pursue avenues to fund and build a new LCCC Fine and Performing Arts building on the Cheyenne campus.
Related Items
1. Program Review Art: Program Review Action Goal, Art Department facility function and accessibility
Description of Goal
Continued participating in obtaining an updated facility for the fine and performing arts.

CONCERNS IDENTIFIED WITH THE NEW PROGRAM REVIEW PROCESS
Several programs had difficulty recognizing that the specific data results reporting sections along with self-study discovery and improvements sections were specific to the areas where they were located. The data reporting, discovery, and improvements sections are repeated in each of the three sections of knowledge distribution, organizational effectiveness, and planning for purposes of developing program descriptions that are distinct to these sections. Because programs struggled with providing data they gathered for showing performance on organizational effectiveness and planning or for identifying data-driven improvements, it is likely they repeated the comments they provided for the earlier section on knowledge distribution. Regardless, the 2015-2016 program review template provides added clarity

that programs are to provide distinct discussions about knowledge distribution data/improvements, organizational effectiveness data/improvements, and planning data/improvements.

Another concern that was raised by at least two programs relates to the low level of expertise programs share with respect to the identification, organization, analysis, and reporting of data. In response, the Department of Institutional Effectiveness has begun offering workshops and in-service concurrent sessions on program-level data development. This effort began formally during fall in-service and was reinforced during Faculty Connections (advising day) on November 3 with a full day workshop involving all faculty from the four schools. It included information on how to complete an annual assessment data summary report in Aquila for performance on student learning competencies and organizational effectiveness outcomes. The training included how to use IR's new single-page data resources table (accessible in Eagles Eye and Aquila). Faculty now have a tool to help them access KPI program analysis data as well as rubric scoring data on institutional student learning competencies extracted from D2L. This data locating tool also includes faculty access to program degrees/certificates completed, course details on fill rates and course success rates, Student Course Questionnaire feedback, and CCSSE and SENSE results. Because all faculty attended this session in an applied format, real learning progress was made. Now, a significant amount of the college's program level data is available online for faculty and staff.

Plans are to repeat data workshop offerings for the spring in-service and advising day during April. Added to training opportunities, Institutional Effectiveness and the Academic Standards Subcommittee for Student Learning Assessment organized ten faculty members and one dean to review the College's 45 assessment plans in May 2015. They generating hundreds of feedback comments within programs' assessment plans that recommended improvements to the research of program performance in student learning and organizational effectiveness. Fall 2015 in-service time was dedicated for all faculty to enter their on-line assessment plans to respond to these review comments and make the requested improvements to their assessment planning. The next peer-review exercise in spring 2016 will focus on peer-review feedback for improving programs' data reporting.

Recent access to the Best Practices Locator (see Appendix D) for program review accessible at the I.E. virtual office (Eagles Eye) adds another resource for future program leaders who will be preparing program review self-studies. The site also includes a model of a complete 2014-2015 self-study review as an example. Soon, a similar best practice resource will be prepared for annual assessment planning, adding to the self-evaluation planning and data generation resources. Best practices for data reporting have not yet emerged.

Surprising to Institutional Effectiveness staff, program review attained little information on faculty qualifications and contributions to the field/discipline. It was discovered in 2014 that Human Resources could not release information on faculty qualifications because this material had to be provided voluntarily by faculty. A form was placed in the program review templates for faculty to use so that the self-study would include this important information, but it was seldom used. The section of the self-study remains a weak link in program-level data gathering. Efforts will continue to strengthen this section, especially as the September 2017 deadline approaches for the College to comply with the HLC guidelines on faculty qualifications.

IMPROVEMENTS MADE TO THE PROGRAM REVIEW PROCESS

Overall, the LCCC process worked well. Some minor adjustments to the operational activities and to the self-study template were needed, however.

The 2015-2016 self-study template underwent multiple changes as a result of lessons learned. As mentioned earlier, the Knowledge Distribution, Organizational Effectiveness, and Planning sections include more effective instructions to ensure a reduction in duplication of information. The section on "Program Specific Education" was removed for the same reason. Added clarity in assumed practices descriptions was provided for multiple sections. Inter-rater reliability training will be strengthened for the reviewer orientations held in early 2016. Minor adjustments were made to the 2015-2016 process time line to formalize the step for reviewers to adjust Program Review Rubric scores based on program responses. The 2015-2016 cycle of review added program-level CCSSE and SENSE student engagement data to the previous sets of data that included course details, KPIs, and student demographics. The next cycle also places more emphasis on completing curriculum maps as a part of the program review experience, and all self-studies include an example mapping tool for programs to use. With the College's increased emphasis on project management, the assumed practices will be adjusted in action plan goal planning to remind programs to utilize the new Institutional Projects Coordinator. Concurrently, the Program Review Rubric was revised to reflect changes made to the self-study template.

PROGRAM REVIEW BEST PRACTICES FOR 2014-2015

The program review process identified 25 best practices for 2015-2016. A Program Review Best Practices Locater (see Appendix D) was developed for the campus and is accessible at the virtual Office of Institutional Effectiveness in Eagles Eye. The locater enables users to review best practices specific to self-study sections and view the detailed descriptions. Over time this list will grow and become a rich resource for strengthening the quality of self-studies. It also provides some recognition of those programs performing at high levels.

QUALITY OF REVIEWER FEEDBACK AND SCORING OF THE PROGRAM REVIEW RUBRIC

Generally, the Program Review Subcommittee members scored evenly across programs and within sections of the scoring rubric. When outliers appeared, their higher or lower scoring patterns remained consistent. Initially, in February 2015 attention was given to inter-rater reliability to reduce large variances in scoring, and this produced consistent scoring during the review of Phase One programs (Art, EMS Paramedics, Diagnostic Sonography, History, Music). Phase One programs also enjoyed a larger group of reviewers, including all faculty scheduled for program reviews in 2015-2016. However, the fall review of Phase Two programs (Automotive, Computer Science, HVAC-R, Paralegal, and Welding) did not include the fifteen faculty who were starting their 2015-16 reviews. The lower number of reviewers and the addition of some new reviewers resulted in more conservative scoring that was consistent among programs.

The Academic Standards Program Review Subcommittee worked through a two-phase review period, three months in spring 2015 to evaluate Phase One programs and three months in fall 2015 to evaluate Phase Two programs. This placed a high burden on evaluators. This report strongly recommends that leadership apply program accountability to ensure that self-studies are completed in the time frame described in the College procedure 10.2P.

NEXT STEP: ACADEMIC STANDARDS ACTION ON PROGRAM REVIEWS

The remaining step to be completed in the program review process is for the Academic Standards Committee to notify the ten programs undergoing review in 2014-2015 that the Committee 1. Accepts their program review self-study as complete or 2. Accepts their program review self-study contingent upon completing a follow-up report addressing the listed underdeveloped sections. Emphasis will be placed on program development of action plan goals as a means of applying a structure for sustaining continuous improvement to the underdeveloped sections. Programs will have until the end of spring 2015 to submit completed reports to the Committee. These reports will be added to the programs' 2014-2015 self-studies as supplements for a record to be evaluated and scrutinized in their subsequent program reviews five years from now.

CONCLUSION

As mentioned above, the lack of research planning infrastructure and low planning activity during the past decade or longer emerges as a primary cause of the low self-evaluation capacity and development of data-driven improvements. The comfort with and the knowledge of how to use data for improvement is difficult to attain without the reasoning and structure to attain it (planning and documentation). As the AQIP Systems Appraisal Feedback report states, the College will need to support the continuous improvement processes it has designed and sustain the discipline the report suggests it will need to achieve growing maturity in continuous improvement. This program review process has begun, and the faculty effort to engage this process has been remarkable during this first year of implementation. This initial showing of discipline that faculty display will require continued reinforcement from leadership, including references to it as a valued activity that deserves a significant time commitment. This discipline exercised over time promises to develop an institution that will fulfill the hopes and dreams of current and future students.

This report concludes with a one-page tabular summary that is symbolic of the College's growing capacity to bring quantitative measurement to the results of a full cycle of program review. It suggests an emerging confidence for programs to improve on this performance in years to come.

Summary of Program Review Rubric Scoring, 2014-2015

For purposes of developing baseline measures to guide future analyses of program review data, this report provides a one-page summary of rubric scoring that represents the evaluation activity of the Academic Standards Program Review Subcommittee for 2014-2015. Please see the table below for details.

The scores represent an aggregation of scores found in the ten individual Program Review Rubrics and include the most recent scoring provided by the Subcommittee. The green high-lighted cells represent program sections scoring at three or above and signify developed sections. All underdeveloped section scores are displayed in clear cells. This method of summary quickly reveals those programs having the most underdeveloped sections. Also apparent is that programs overall performed strongest on the Knowledge Distribution section, less so on Organizational Effectiveness, and least so on Program Planning. Because AQIP expects the institution to show gains in maturity for process self-evaluation and data-driven improvements of processes, the summary provides scoring specific to these features with both averaging 2.75 and 2.80 respectively. During the 2019-2020 Comprehensive Quality Review, the institution should be able to show time-trend improvements in these performance levels as well as improvements in the AQIP maturity rubric levels for continuous improvement.

A.S. Program Review Subcommittee: Summary of Program Review Rubric Scoring, 2014-2015
Reviewers use a five-point Likert scale with 1 being the lowest value. Scores below 3 signify underdeveloped sections (clear cells)

II. Knowledge Distribution	Art	Auto	C. Sci	Hist	HVAC	Music	P. legal	Medics	Sonog.	Weld	Avgs.
A. Design	2.78	3.03	2.75	3.75	3.07	3.30	3.26	3.38	3.13	2.70	
B. Ongoing program self-evaluation and feedback to inform process improvement and adapt to change	2.72	3.00	2.48	3.33	2.67	2.81	2.93	3.10	3.09	2.33	
C. Improvements and/or changes implemented during the five-year review period. Explain the program's process for making the transition from evaluation and findings to defining improvements	2.75	2.67	2.50	3.40	3.00	3.00	2.83	3.71	3.00	2.50	
KNOWLEDGE DISTRIBUTION AVERAGE =	2.75	2.90	2.62	3.49	2.91	3.04	3.01	3.40	3.07	2.51	2.97
III. Organizational Effectiveness											
B. Design of the organization	3.06	2.97	2.55	3.70	2.79	3.18	3.01	3.05	3.02	2.52	
C. Ongoing self-evaluation and feedback to inform process improvement and adapt to change	2.67	2.44	2.12	3.28	2.39	2.81	2.89	3.67	3.17	2.00	
D. Improvements and/or changes implemented during the five-year review period. Explain the program's process for making the transition from evaluation and findings to defining improvements	3.00	2.67	1.80	3.67	2.33	2.83	3.17	3.75	3.00	1.50	
ORGANIZATIONAL EFFECTIVENESS AVERGE =	2.91	2.69	2.16	3.55	2.50	2.94	3.02	3.49	3.06	2.01	2.83
IV. Program Planning											
A. Design of program planning	2.38	2.75	2.45	2.69	2.83	3.02	3.27	2.75	3.04	2.04	
B. Ongoing self-evaluation and feedback to inform process improvement and adapt to change	2.67	2.50	2.20	3.11	2.50	2.82	2.67	3.13	3.00	1.83	
C. Improvements and/or changes implemented during the five-year review period. Explain the program's process for making the transition from evaluation and findings to defining improvements	2.50	3.00	2.60	3.83	2.50	3.00	3.00	1.50	3.00	2.00	
PROGRAM PLANNING AVERAGE =	2.52	2.75	2.42	3.21	2.61	2.95	2.98	2.46	3.01	1.96	2.69
V. Conclusion: Capacity for Future Success											
CAPACITY FOR FUTURE SUCCESS AVERAGE =	3.00	3.00	2.60	4.00	2.67	3.01	3.17	3.33	3.29	2.33	3.04
SELF STUDY AVERAGE =	2.66	2.81	2.50	3.41	2.52	3.02	2.96	3.16	3.08	2.07	2.82
SELF EVALUATION AVERAGE (all 3 sections) =	2.69	2.65	2.27	3.24	2.52	2.81	2.83	3.30	3.09	2.05	2.75
IMPROVEMENTS TIED TO DATA AVERAGE (all 3 sections) =	2.75	2.78	2.20	3.63	2.61	2.94	3.00	2.99	3.00	2.00	2.80
Part Two: Overall Program Rating Based on AQIP Maturity Scale	2.33	2.00	2.00	3.00	2.00	2.38	2.00	3.08	3.29	2.00	2.41