

Kaua`i Community College
Annual Program Review Update for
Institutional Research & Analysis
2016-2017

Program Description

Institutional Research was a one-person unit that previously reported to the Chancellor's Office. During a reorganization in January 2017 Institutional Research moved into a newly created Institutional Effectiveness and University Center department. The title was changed to Institutional Research & Analysis to foster data-informed support with an emphasis on analytic efforts and actionable deliverables.

Institutional Research & Analysis strives to fulfill the following functions:

- File regular and ad hoc reports to a broad spectrum of constituents requesting information, including government, accrediting agencies, colleges, and academic departments.
- Improve the decision-making database (ODS) through working with the UH System Office to ensure the quality of captured data.
- Support internal and external survey management policies and processes.
- Coordinate timely, accurate, and thorough reporting on various measures of academic performance, program efficacy, and student outcomes. Research areas include assessment of student performance, and pedagogical, curricular, and programmatic initiatives.
- Provide analytical support with evidence-based information about student learning, faculty productivity, program effectiveness, and resource utilization at Kauai Community College.

Program Mission Statement:

Institutional Research & Analysis serves as a resource by providing systematic, timely, user-friendly official data and research services that are used to enhance effective decision-making and policy formulation, prepare mandated reports, and to measure institutional effectiveness.

Goals

In fulfilling its mission, the Institutional Research must strive for continuous improvement in:

1. Data accuracy
2. Timely reporting
3. Actionable information

Part I. Quantitative Indicators

Table 1. Institutional Research

	2017-2018	2018-2019	2019-2020	2020-2021
DEMAND				
# Internal IR Requests				
# External IR Requests				
# Trainings/Workshops				
# Dashboards & Self-service Tools Created				
EFFICIENCY				
% Internal IR Requests Completed On-time				
% External IR Requests Completed On-time				
# Processes Improved/Streamlined				
# Dashboard & Self-service Tool Users				
EFFECTIVENESS				
<u>Net Promoter Score</u>				

Part II. Analysis of the Program

The 2016-2017 APRU will serve as a document to establish baseline data to evaluate the demand, efficiency and effectiveness of Institutional Research & Analysis moving forward. Historically projects and associated deliverables were not effectively tracked and much of the methodology used to create the reports were not documented. As a result, automation of recurring reports through development of reusable ODS scripts and the creation of dashboards is a strong focus for 2017-2018. Building a knowledge base and code/report repository to streamline ad hoc requests will allow more time to support strategic initiatives with actionable data. Equal emphasis will be placed on tracking analytic efforts so quantitative indicators may be reported in future program review updates.

Part III. Goals, Alignment and Action Plan

Goal: Dashboarding Key Metrics

Dashboard creation and maintenance are key to monitor institutional metrics. Several dashboards have already been created and a project roadmap has been developed to scope the creation of new dashboards.

Below is a summary of the dashboards currently available for use by Institutional Research & Analysis:

1. Active Student Dashboard (Appendix 1) – Tracks enrollments by Program at Pre-Census, Census and End of Semesters (captures attrition) with the ability to filter by targeted variables.
 - a. Alignment with Strategic Goals
 - i. UHCC/KCC Initiative: Enrollment
 1. Strategic Goal 17: Increase Recent High School Graduates Enrollment
 2. Strategic Goal 18: Increase Pacific Islander Enrollment
 3. Strategic Goal 19: Increase High School Non-Completers and GED Recipient Enrollment
 4. Strategic Goal 20: Increase Enrollment of Working Adults
 5. Strategic Goal 21: Increase Enrollment of International Students
2. Program Completions Dashboard (Appendix 2) – Provides up to date tracking of all award types by program with the ability to filter by targeted variables. Keeping this data accessible and front of mind will foster awareness and allow for deeper analysis regarding program completions.
 - a. Alignment with Strategic Goals
 - i. UHCC/KCC Initiative: Hawaii Graduation Initiative
 1. Strategic Goal 1: Increase the Number of Graduates
 2. Strategic Goal 2: Increase the Number of Native Hawaiian Graduates
 3. Strategic Goal 3: Increase the Number of Low Income Student Graduates
3. Course Level Dashboard (Appendix 3) – Supports course level analysis in Program Review and dossier requests. Provides birds eye view for programs with large student populations and high attrition rates at the course level, grade distribution reports and supports drill-down to student and instructor level data.
 - a. Alignment with Strategic Goals
 - i. Institution Set Standard 1: Course Completion

4. Institution Set Standards Scorecard (Appendix 4) – Summary of Institution Set Standards 1-6 with drill down ability to student level data to target intervention efforts. Provides baseline, targets and actuals in an intuitive visual display.
 - a. Alignment with Strategic Goals
 - i. Institution Set Standards 1-6: Monitor, track, analyze and report goals

Below is a summary of the dashboards in development by Institutional Research and Analysis:

1. Student Success Metrics Dashboard - More effectively track Success Rates for all award types.
 - a. Alignment with Strategic Goals
 1. Strategic Goal 4: Increase the Number of Students Who Transfer

Goal: Update IR Website

The Institutional Research website will be updated to include more relevant information and to meet accreditor requirements.

Status Report for the prior year requests:

N/A – Baseline APRU

Program Goal & Campus Strategic Goal or Priority Alignment	
Action Item	
Resource Acquired	
Outcome(s)	
Outcome(s) Evaluation (Improvements made to program based on assessment data)	
Action Plan if outcome was not met	

Action Plan and New Resource Request

The use of Tableau to dashboard key performance indicators was piloted by acquiring a free faculty license using the [Tableau for Teaching](#) program geared toward incorporating visual analytics into course curriculum. Upon further review of the license specifications, we discovered that commercial research and institutional research use – the use of institutional data (including staff, program, management and operations data) to inform decision-making and

planning are not considered noncommercial academic research and a license would need to be purchased. Department funds were used to purchase a one-year subscription license.

Program Goal & Campus Strategic Goal or Priority Alignment	Strategic Goals 17-21 – Enrollment Strategic Goals 1-3 – Hawaii Graduation Initiative Institution Set Standard 1 – Course Completion Institution Set Standards 1-6 Scorecard
Action Item	Procure Tableau Desktop Professional License
Resource(s) Request	\$655.20
Person(s) Responsible and Collaborators	Amanda Fluharty – Associate Professor, Institutional Research & Analysis
Timeline	November 2018 (one-year subscription)
Indicator of Improvement	Dashboard adoption and continued usage.
PSLO Impacted	Institutional Research & Analysis PLO 1-3
Current Status	Existing request (funded 2017-2018)

Program Goal & Campus Strategic Goal or Priority Alignment	Strategic Goal 13 - Enhance Facilities with Appropriate Technology and Ensure Facilities Support 21st Century Learning and Teaching Environments Provide printed reports to stakeholders for Key Performance Indicator Data (Communication)
Action Item	Color LaserJet Printer
Resource(s) Request	\$500.00
Person(s) Responsible and Collaborators	Amanda Fluharty – Associate Professor, Institutional Research & Analysis
Timeline	Hardware ~ 5 year lifecycle
Indicator of	Improvement in information dissemination – better use of data visualization

Improvement	deliverables
PSLO Impacted	Institutional Research & Analysis PLO 1-3
Current Status	New request

Program Goal & Campus Strategic Goal or Priority Alignment	Provide larger monitors for Institutional Research & Analysis
Action Item	Large Computer Monitors for Institutional Research & Analysis (2)
Resource(s) Request	\$600.00
Person(s) Responsible and Collaborators	Amanda Fluharty – Associate Professor, Institutional Research & Analysis
Timeline	Hardware ~ 5 year lifecycle
Indicator of Improvement	Improvement in data visualization and analytics
PSLO Impacted	Institutional Research & Analysis PLO 1-3
Current Status	New request

Part IV. Resource Implications

Institutional Research and Analysis purchased a Tableau subscription license to assist in the creation of refreshable dashboards to automate tracking of recurring key metrics. Annual cost for one subscription license is \$655.20. This will allow Institutional Research & Analysis to publish dashboards on its website to reduce the number of ad hoc requests and better inform stakeholders about the student population in relation to strategic initiatives and continuous improvement efforts.

We understand that some of the data may not be appropriate for public consumption. In that case, we will need to work with System IT to create a login credential environment to allow UH users to view data while protecting confidential data. Student level information will be kept in strictest confidence and will not be available via web dashboard reporting.

RESOURCES NEEDED			OUTCOMES
Initial Acquisition Cost	Annual Recurring Cost	Useful Life	(Identify and Quantify)
\$655.20	\$655.20	1 year	Tableau Desktop Professional License - Automated Key Metric repository for dissemination and monitoring
\$500.00	\$0	5 years	Color LaserJet Printer - Provide printed reports to stakeholders for Key Performance Indicator Data
\$600.00	\$0	5 years	Large Computer Monitors - Improvement in data visualization and analytics

Part V. Program Assessment

List your Program Outcomes (PO's) and indicate if they were assessed.

1. Provide accurate, usable data for faculty and staff.
 - a. Evidence: Percentage of requests in closed status using request status tracking. A request is marked resolved once the work is complete. This status is not updated to a closed status until stakeholder confirms data met request needs.
2. Provide timely and effective customer service
 - a. Evidence: [Net Promoter Score](#)
3. Reduce number of ad hoc requests through self-service reporting tools.
 - a. Evidence. Decline in percentage of reports categorized as ad-hoc requests.

Institutional Research & Analysis 5-year Roadmap for planning and development

Year	Developmental Focus for Planning
1 (2017-2018)	<ul style="list-style-type: none"> • Dashboard key metrics to reduce number of ad hoc requests. • Develop code repository using SQL scripts to automate any recurring reports and apply logic more consistently in subsequent analyses. • Monitor and track incoming request to develop calendar of deadlines for recurring reports and effectively track APRU metrics. • Update website with relevant information that meets accreditation requirements.

Year	Developmental Focus for Planning
2 (2018-2019)	<ul style="list-style-type: none"> • Provide survey development support. • Coordinate and streamline survey process so a repository of student data is available for actionable response to identified need. <ul style="list-style-type: none"> ○ Remove silos in Google Docs repositories ○ Track surveys sent to each student to prevent survey fatigue and ensure all students are represented in the collected data • Identify variables that are not currently collected but would be beneficial in an analytic capacity and work with stakeholders to develop a path forward to collect and warehouse for use in relational data models.
3 (2019-2020)	<ul style="list-style-type: none"> • Build inferential analysis capability to support more advanced analyses.
4 (2020-2021)	<ul style="list-style-type: none"> • Develop predictive models to identify opportunities for intervention throughout the student lifecycle using attributes indicative of risk types extracted in inferential analysis efforts from Year 3.
5 (2021-2022)	<ul style="list-style-type: none"> • 5-year review. Reflect; assess wins and opportunities for improvement. Construct roadmap for next review cycle.

Part VI. Programs Cost Per SSH

Part VII. Capacity Collect Alternative Measurement (Not Applicable)

Appendix 1: Active Student Dashboard

Kauai Community College
Active Students by Term



MAJOR	DEGREE	FALL 2013	FALL 2014	FALL 2015	FALL 2016	FALL 2017	Grand Total
Accounting	AAS	76	63	57	41	40	277
	CA	2	2			2	6
	CC	7					7
	CO	2	5	4		2	13
Advanced Geographic Information Sys..	CO				1		1
Auto Body Repair & Painting	AAS	13	12	9	4	1	39
	CA	2	3	2	2	1	10
	CO	3			1	1	5
Automotive Mechanics Tech	AAS	36	37	36	34	29	172
	CA	7	5	1	2	2	17
	CC	9					9
	CO		4	3	1	3	11
Business	AS			18	33	36	87
	CA			7	6	13	26
	CO			1	4	2	7

FREEZE EVENT
CENSUS

TERM
(Multiple values)

TERM TYPE
FALL

DEPARTMENT
(All)

DEGREE
(All)

MAJOR
(All)

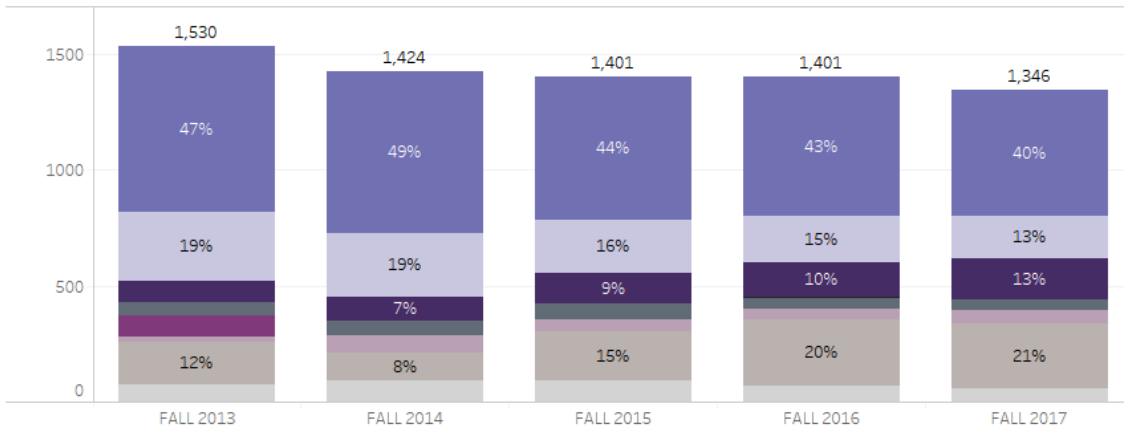
MAJOR SPECIALIZATION
(All)

UH ETHNICITY
(All)

GENDER
(All)

DEGREE

- AA
- AAS
- AS
- ASC
- CA
- CC
- CO
- ND
- Null



Appendix 2: Program Completions Dashboard



Kauai Community College Degrees & Certificates Awarded by Fiscal Year

MAJOR	OUTCOME	2010	2011	2012	2013	2014	2015	2016	2017	2018	Grand..
Accounting	AAS	11	14	19	17	13	10	16	8		108
	CA		6	8	6	5	6	9	5	1	46
	CC				5	30	3				38
	CO				10	19	78	103	79		289
Adult Care Home Operator	CO						2				2
Auto Body Repair & Painting	AAS		2		1		3		1		7
	CA		3		1		29	1	2		36
	CO	2	13	3	16	28		8	2		72
Automotive Mechanics Tech	AAS	3	6	3	4	5	2	6	3		32
	CA	1	7	10	6	5	3	11	39		82
	CC	11	24	40	42	41					158
	CO	5	7	17			36	43	51		159
Business	AS							1	2		3
	CA								4		4
	CO							3	5	1	9

FISCAL YEAR
(Multiple values) ▾

MAJOR
(All) ▾

MAJOR SPECIALIZATION
(All) ▾

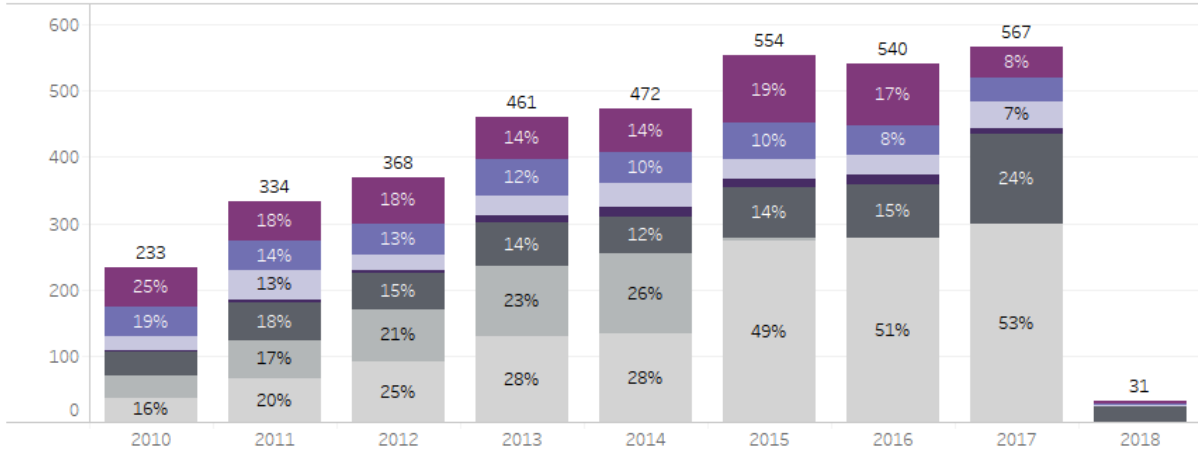
OUTCOME
(All) ▾

DEPARTMENT
(All) ▾

UH ETHNICITY
(All) ▾

IPEDS RACE/ETHNICITY
(All) ▾

GENDER
(All) ▾

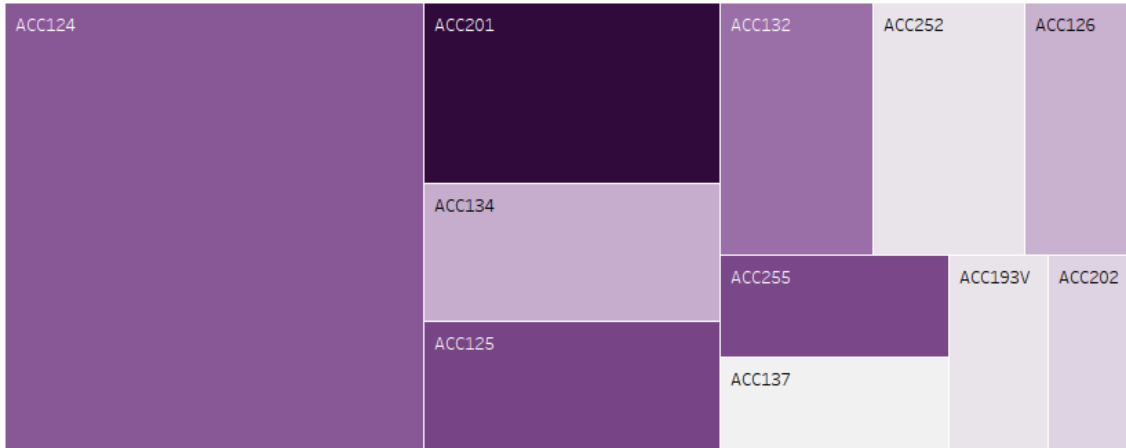


OUTCOME

- AA
- AAS
- AS
- ASC
- CA
- CC
- CO

Appendix 3: Course Level Dashboard

Course Trends



YEAR - SEMESTER

FREEZE EVENT

ACADEMIC YEAR

ACADEMIC PERIOD

DIVISION

DEPARTMENT

SUBJECT

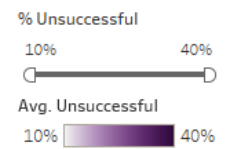
COURSE	TOTAL N	WITHDRAWN N	% Unsuccessful	GPA
ACC124	88	10	25%	2.68
ACC125	18	2	28%	2.56
ACC126	13	1	15%	3.08
ACC132	18	1	22%	2.47
ACC134	19	1	16%	2.71
ACC137	10	0	10%	2.94
ACC193V	9	0	11%	3.39
ACC201	25	6	40%	1.71
ACC202	8	1	13%	2.67
ACC252	18	1	11%	3.25
ACC255	11	2	27%	3.00
Grand Total	237	25	23%	2.70

COURSE

INSTRUCTOR(S)

STUDENT PROGRAM

UH ETHNICITY



Appendix 4: Institution Set Standards Scorecard

UHCCP 4.203 Institution Set Standards

