

GROWING OUR OWN INSTEAD OF LEASING FROM THE CONTINENT:
A CASE STUDY ON THE IMPACT OF A COMMUNITY COLLEGE TEACHER
PREPARATION PROGRAM ON NATIVE HAWAIIAN PRESERVICE TEACHERS

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Abstract

Teacher transiency and teacher quality are of utmost concern in Hawai'i. For decades, the Hawai'i Department of Education has implemented hiring practices that privilege out-of-state teacher applicants who often only make a two-year commitment to the teaching position. As a Native Hawaiian teacher educator and scholar, I am concerned with the perpetual disproportion between the high number of Native Hawaiian students and low number of Native Hawaiian teachers warranted the need for this study. Community Colleges are significantly increasing in support of teacher preparation and seen as a viable resource in the struggle against teacher shortage and teacher diversity. This study examined the barrier and support factors that influenced the educational and career goal attainment of Native Hawaiian preservice teachers at a community college teacher preparation program. Three forms of data were collected to answer the research questions: 1) document and report analysis; 2) student surveys; and 3) student interviews. The case for this study was the teacher preparation program at Leeward Community College in Pearl City, Hawai'i. The research population consisted of 51 survey participants of the Associate of Arts in Teaching (AAT) Program from fall 2013 and spring 2014. In addition six graduates of the program, at various levels of their teaching career, participated in two rounds of interviews. A case study approach and qualitative data analysis were used to determine supports and barriers for future teachers at the select community college. The barriers and support factors were categorized as follows: 1) institutional barriers and supports; 2) instructional barriers and supports; and 3) personal barriers and supports. The greatest barriers students experienced were financial, time management and remedial coursework. The greatest overall support factors for students

were advising and faculty support. Results further indicated that although Native Hawaiian students represent the highest enrolled population in the teacher education program, they are only ranked fourth highest among program graduates, falling below Caucasian, Japanese and Filipino students. Findings from this study may be beneficial to community college teacher preparation programs. Researchers interested in Native Hawaiian and Indigenous student success in post-secondary institutions may also find the outcomes useful.

Table of Contents

List of Tables.....	vii
List of Figures.....	x
Chapter 1: Introduction.....	1
Background.....	1
Statement of the Problem.....	3
Purpose of the Study.....	5
Research Questions.....	6
Leeward Community College.....	6
Significance of the Study.....	9
Assumptions of the Study.....	10
Limitations and Delimitations of the Study.....	11
Definition of Key Terms and Acronyms.....	12
Summary.....	16
Chapter 2: Review of Literature.....	17
Introduction.....	17
K-12 Teacher Shortage.....	19
Inequity between Current Teacher Workforce and Student Population.....	21
Community-centered practices.....	22
Culturally relevant practices.....	25
Community Colleges and Teacher Preparation.....	28
Associate of Arts in Teaching at Leeward Community College.....	30
Indigenous Research Methodology.....	38
Theoretical Framework: Bronfenbrenner’s Ecological Systems.....	42
Research Questions.....	45
Summary.....	46
Chapter 3: Methodology.....	47
Introduction.....	47
Research Questions.....	49
Case Selection.....	49
Participants.....	49
Description of institution and program.....	52
Procedures.....	53
Data collection.....	53
Survey.....	55
Interview.....	56
Human subjects guidelines.....	59
Data analysis.....	60
Document analysis.....	60
Survey and interview analysis.....	61
Quality Considerations.....	62
Validity/credibility.....	62
Reliability/dependability.....	63
External validity/transferability.....	64
Summary.....	65

Chapter 4: Findings.....	66
Introduction	66
Survey Results.....	67
Interview Results.....	86
Triangulation of Data	112
Student demographics.....	112
Reasons for selecting Leeward.	115
Transferring to 4-year teacher preparation institutions.....	116
Student persistence.....	118
Teaching in the home community.	119
Barriers to educational and career goal attainment.....	120
Supports to educational and career goal attainment.	121
Summary.....	122
Chapter 5: Conclusion and Discussion	123
Introduction	123
Summary of Research Study	124
Major Findings	125
Influential factors – barriers.	125
Influential factors – supports.....	127
Implications.....	128
Recommendations.....	130
In a Perfect World: A Call to Action.....	134
Topics for Future Research	139
Conclusion.....	140
Appendix A: Interview Protocol – Contacting Participants.....	142
Appendix B: Interview Process Guide	143
Appendix C: Interview Questions.....	144
Appendix D: Interview Question Crosswalk	146
Appendix E: Sample of Survey Consent Form.....	148
Appendix F: Online Survey	149
Appendix G: Sample of Interview Consent Form.....	155
Appendix H: Sample of Administrator Consent Form to Conduct Research	157
Appendix I: Sample of Program Coordinator Consent Form to Conduct Research.	158
Appendix J: Copy of Human Subjects/IRB Approval.....	159
References	160

List of Tables

Table		Page
1.	Increase of Enrollment of AAT Majors by Academic Year.....	32
2.	Enrollment by Ethnic Background – AY 2012 – 2013.....	33
3.	Enrollment by Gender – AY 2012 – 2013.....	35
4.	Enrollment by Age – AY 2012 – 2013.....	37
5.	Demographic Profile of Survey Participant.....	68
6.	Reasons for Choosing Leeward Community College for the First 2 Years of Education.....	70
7.	Student Preparedness and Time Management.....	71
8.	Demographic Profile of Student Ethnic Background.....	73
9.	Influencing Factors Relating to Teacher Education Program.....	74
10.	Personal Influences in Educational and Career Goal Attainment.....	75
11.	Instructional and Institutional Influences in Educational and Career Goal Attainment.....	76
12.	Instructional and Institutional Influences in Educational and Career Goal Attainment.....	77
13.	Influences in Educational and Career Goal Attainment.....	78
14.	Influences in Educational and Career Goal Attainment.....	79
15.	Influential Factors/Barriers to Educational and Career Goal Attainment.....	80
16.	Influential Factors/Barriers to Educational and Career Goal Attainment.....	81
17.	Influential Factors/Barriers to Educational and Career Goal	

	Attainment.....	82
18.	Influential Factors/Supports to Educational and Career Goal Attainment.....	84
19.	Influential Factors/Supports to Educational and Career Goal Attainment.....	85
20.	Influential Factors/Supports to Educational and Career Goal Attainment.....	86
21.	Demographic Profile of Interview Participants.....	88
22.	Student Goals.....	90
23.	Student Quotes for Interview Question 1.....	91
24.	Influence in Teaching as Career Choice.....	92
25.	Student Quotes for Interview Question 2.....	93
26.	Student Quotes for Interview Question 3.....	94
27.	Reasons for Choosing Leeward.....	95
28.	Select Quotes for Interview Question 4.....	95
29.	Reasons for Choosing AAT Program.....	96
30.	Reasons for Choosing AAT Program.....	97
31.	Ways Leeward/AAT Prepared Students for Transfer to 4-Year Institutions.....	98
32.	Experiences at Leeward/AAT that Affected Student Persistence.....	99
33.	Select Quotes for Interview Question 4.....	100
34.	Influential Factors/Barriers to Educational and Career Goal Attainment.....	101
35.	Influential Factors/Barriers to Educational and Career Goal Attainment.....	102
36.	Influential Factors/Barriers to Educational and Career Goal	

	Attainment.....	103
37.	Select Quotes for Interview Question 9.....	104
38.	Influential Factors/Supports to Educational and Career Goal Attainment.....	105
39.	Influential Factors/Supports to Educational and Career Goal Attainment.....	106
40.	Influential Factors/Supports to Educational and Career Goal Attainment.....	107
41.	Select Quotes for Interview Question 10.....	108
42.	Student Quotes – On Leeward CC Wai‘anae Campus as Support Factor.....	109
43.	Student Quotes – On Being a Teacher of Hawaiian Ancestry.....	110
44.	Comparative Analysis of Student Ethnicity by Enrollment vs. Graduation.....	129

List of Figures

Figure		Page
1.	Diagram of Bronfenbrenner's Ecological Systems Theory Model.....	43
2.	Sampling Criteria and Planning Table.....	57
3.	College English and Math Preparedness.....	69

Chapter 1: Introduction

Background

The current teacher shortage is creating an outpour of concern throughout the nation and across educational institutions (Aud et al., 2012). While student enrollment in America's K-12 public schools continues to grow, so does the need for highly qualified teachers to fill classrooms. According to a projection from the National Center for Education Statistics from school years 2010 – 2022, enrollment in public schools is expected to rise by 7% from 43.5 to 53.1 million students (Aud et al., 2012). The continuous need for highly effective and qualified teachers and the high retirement and attrition rates of teachers magnify the problem of growing student enrollment. Within the last few years, the U.S. Department of Education anticipated the retirement of almost 40% of the teaching workforce (Gederman, 2001).

In addition to the retirement of teachers, other key factors contribute to the mounting teacher shortage such as high teacher turnover and lower numbers of teachers receiving initial state licensure. Attrition rates of teachers can be high, particularly in schools serving lower income students and minority populations (Ronfeldt, Loeb, & Wyckoff, 2013). Teacher turnover can add to low student achievement and disrupt the school climate. An analysis of the Beginning Teacher and Attrition Report compiled by the NCES noted 2.25 million teachers were hired between the years of 1994-2004, and 2.7% of teachers left the field (Kaiser, 2011). An alarming impact is the US Department of Education estimates that attrition rates can cost the national government over \$7.3

billion dollars based on teachers who leave their schools or districts (Coneely, Nancy; Uy, Erin, 2010).

Many experts believe that community colleges are a suitable fit in helping to meet the demands of teacher quality and quantity issues because of the support systems and recruitment measures already in place (Moore, 2000). However, as the importance of teacher preparation programs offered at community colleges continues to increase, the institutions must ask the question *how* these programs can improve in order to support their students and decrease teacher shortage issues. Likewise, the question of *what* measures can be taken to recruit, prepare and retain prospective teachers must be addressed. It is imperative that community colleges provide the necessary support structures for students from the time they begin their first year to the time they are ready to transfer into a four-year teacher preparation program (Allen, 2002). Secondly, community colleges must develop effective programs that prepare prospective teachers and help them attain their educational and career goals. Educational attainment is synonymous with success and achievement, and in the field of education, college graduation and achievement of a license to teach at schools in their state. Recruiting, retaining and supporting students in their first two years of teacher preparation, is the first step in helping them realize their education goal of graduation and career goal of becoming a teacher.

The researcher seeks to determine the barrier and support factors that influence educational and career goal attainment of prospective teachers at Leeward Community College. By identifying the barriers and support factors that affect student success of future teachers, measures can be taken to improve or create quality teacher preparation

programs at the community college level. In turn, graduates from these programs can help to reduce the teacher shortage issues that currently prevail.

Statement of the Problem

With the nation-wide rise of K-12 public school enrollment and the continuous retirement and attrition rates of teachers in the field, the necessity for producing qualified teachers is obvious. Community Colleges are often overlooked in the teacher education system. However, in recent years they are proving to be an important resource in recruiting future teachers and can be a valuable support in the struggle against teacher shortage and increasing K-12 student enrollment (Gerdeman, 2001). The current supply of qualified beginning teachers is inadequate to satisfy the demands of the nation's student enrollment, and this is doubly impacted by the number of beginning teachers leaving the teaching career within the first five years (US Congress, 2008). Because of the growing need, professionals in the education system must consider community colleges as a viable and sustainable source for the recruitment of future teachers.

In addition, the need for more diversity in the teaching profession has sparked interest in community colleges as an influential contributor to the preparation of prospective teachers of color (Zirkle, Brenning, & Marr, 2006). While continuing to focus on providing access to higher education for non-traditional students, minorities and disadvantaged or underrepresented groups, community colleges have realigned their focus and have become complex educational institutions many of which include an Associate of Arts in Teaching program and articulation agreements with four-year institutions (Moore, 2000). This is a significant contribution to teacher preparation. An

analysis of the 2012 NCES report revealed that while K-12 students of color make up more than 45% of the elementary and secondary school population only 17.5% of the teacher workforce includes teachers of color (Aud et al., 2012). This is a major disproportion between the students of color who make up almost half of the K-12 student body, and only 17% of the teachers that might reflect who they are. Because of this disparity and in order to ensure more diversity in the teacher workforce, many experts believe that the role of Community Colleges is becoming increasingly significant in the field of teacher preparation (Allen, 2002).

Community Colleges enroll more than 40% of all undergraduates and statistically enroll the highest proportion of students of color in higher education (Townsend & Ignash, 2003). These institutions are attempting to provide more qualified and prepared teachers for their districts with a variety of programs and through statewide articulations with four-year university programs (Allen, 2002). This national effort on the part of Community Colleges is proving to be an influential remedy to the dire need for adding quantity and quality to the teacher workforce. On the local level in Hawai'i, the Associate of Arts in Teaching (AAT) program at Leeward Community College (LCC) has attempted to address the issue of teacher shortage through the recruitment of local students, retention efforts, and through the preparation of highly effective teachers.

Since its launch in 2006, the AAT program at Leeward Community College has yet been studied, and therefore, current research does not exist to provide background on the effects of the program with regard to teacher preparation and impacts on the teacher shortage in Hawai'i. It is necessary to add to the body of literature that justifies the role

of community colleges in teacher education, and to determine specifically how the AAT program at LCC has influenced the field of education in Hawai'i.

In order to understand the impact of the Associate of Arts degree on teacher preparation and the state teacher shortage, it is important to talk with program graduates and gain insight on their experiences. This study will produce further knowledge about the extent to which the AAT program at Leeward supports the educational and career goal attainment of their students. Results will likewise offer insight relating to the program's contribution to the overall production of highly effective teachers in the state of Hawai'i.

Purpose of the Study

The purpose of this study is to examine the role of community colleges in teacher preparation and the impact of the Associate of Arts in Teaching program at Leeward Community College to determine the experiences of program participants (prospective teachers), and how their experiences in the program affect their educational success. The study will provide a comprehensive overview of the AAT program and provide a focused lens to look specifically at the underrepresented population of Native Hawaiian students. Hence the problem to be addressed in this study is the role of Leeward Community College in providing access to teacher preparation in Hawai'i, and investigating the barrier and support factors that contribute to the students' overall educational and career goal attainment.

Research Questions

The researcher will use a qualitative case study approach to answer the following research questions:

Central Question

What are teacher candidates' perspectives on the barrier and support factors that impact their educational and career goal attainment at a community college K-12 teacher preparation program?

Sub questions

1. What factors influence the retention and graduation of Native Hawaiian students in the AAT program at Leeward Community College?
2. What is the role of Leeward Community College in providing access to teacher preparation for underrepresented students?
3. What are the barrier and/or support factors for career goal attainment in teaching for AAT graduates?

Leeward Community College

Leeward Community College opened its doors in 1968 with approximately 1,500 students and a mission to create innovative programs for the community. In 1969, the school moved to its current location in Pearl City Hawai'i (Martel, 2013). As one of the seven community colleges in the University of Hawai'i system, its mission is linked to the following principles:

- **Access:** *To broaden access to postsecondary education in Hawai'i, regionally, and internationally by providing open-door opportunities for students to enter quality educational programs within their own communities.*
- **Learning and Teaching:** *To specialize in the effective teaching of remedial/developmental education, general education, and other introductory liberal arts, pre-professional, and selected baccalaureate courses and programs, with the goal of a seamless system articulation and transfer, where appropriate. To structure programs in such a way that they reflect not only academic rigor, but also, student development, learning outcomes, and student goals. The College is committed to the achievement of student learning.*
- **Work Force Development:** *To provide the trained workforce needed in the State, the Asia-Pacific region, and internationally by offering occupational, technical, and professional courses and programs, which prepare students for immediate and future employment and career advancement.*
- **Personal Development:** *To provide opportunities for personal enrichment, occupational upgrading, and career mobility through credit and non-credit courses and activities.*
- **Community Development:** *To contribute to and stimulate the cultural and intellectual life of the community by providing a forum for the discussion of ideas; by providing leadership, knowledge, problem-solving skills, and general informational services, and by providing opportunities for community*

members to develop their creativity and an appreciation for the creative endeavors of others.

- ***Diversity:*** *To build upon Hawai'i's unique multi-cultural environment and geographic location, through efforts in curriculum development, and productive relationships with international counterparts, students' learning experiences will prepare them for the global workplace, with particular emphasis on Asia and the Pacific Rim (Martel, 2013).*

Currently, Leeward Community College serves nearly 8,100 students statewide and is the largest Native-Hawaiian-serving institution within the 10-campus University of Hawai'i system. Of the over 8,000 students enrolled at Leeward CC, more than 46% of them are of either Part Hawaiian or Filipino ancestry. This statistic is of significant importance in relation to teacher preparation and the demographic profile of teacher candidates. In the Hawai'i Department of Education (HIDOE), the highest ethnic and racial student populations are Native Hawaiian and Filipino, yet these groups are among the lowest represented demographics in the HIDOE teacher population (Lingle, 2010). The public school teacher workforce in Hawai'i is largely made up of Caucasian and Japanese teachers while the two groups that make up the largest percentage of students are Native Hawaiian and Filipino (Moniz, 2008). Therefore, not only does the HIDOE lack in quantity of highly qualified teachers for the classroom, they continue to employ a teacher workforce that is disproportionately representative of their student population.

In an effort to respond to the teacher shortage in Hawai'i and to increase the number of highly qualified teachers and educational assistants in the state, Leeward Community College established an Associate of Arts in Teaching degree program

(Martel, 2013). Since its establishment in 2006, the AAT program at Leeward has contributed significantly to the teacher education system in Hawai‘i and continues to do so with articulation agreements among several four-year teacher preparation programs statewide (Cabral, 2012). Articulation agreements have been established with the University of Hawai‘i at Mānoa, University of Hawai‘i West O‘ahu, Chaminade University of Honolulu and The University of Phoenix.

Significance of the Study

Recruiting, retaining and preparing highly qualified teachers proves to be a challenge increasingly difficult to meet. The state of Hawai‘i institutions of higher education do not produce enough highly qualified teachers each year to fill the need of the HDOE (Lingle, 2010). Because of this deficiency, the HDOE often hires prospective teachers from out-of-state and in many instances hire candidates who have undergone alternative teacher education certification such as Teach for America (TFA). Findings from a recent Chamber of Commerce report assert that 17% of teachers in Hawai‘i were certified through an alternative route as compared to the national average of 13% (Lingle, 2010). Short-term approaches like hiring out-of-state teachers for 2-year terms have proven to be more harmful than helpful because the majority will leave within 2 to 3 years of teaching (Kawakami, Keahiolalo-Karasuda, Carol, & King, 2011). Instead of temporary fixes, the state of Hawai‘i must consider long-term investments in future teachers by encouraging more home grown teachers who have community and familial relationships and will more likely stay in the profession and in Hawai‘i.

Recruiting, retaining, and preparing teachers from Hawai'i communities is imperative. It is equally important to acknowledge the evolving role of community colleges in teacher preparation and the impact of such programs on the quantity and quality of future teachers. Research regarding the effects of the AAT program at Leeward Community College is lacking and much needed. This study will add to the body of literature that considers the influence of community colleges in teacher preparation and will provide specific feedback for Hawai'i teacher preparation programs, as well as offer suggestions for improvement of the AAT program at Leeward. The findings will offer recommendations to improve teacher preparation in the AAT program to support the recruitment, retention and preparation of prospective teachers.

Assumptions of the Study

The study yielded several assumptions relating to methodology and interpretation of data. First, the researcher assumed that the methodological approach provided an answer to the research questions. The case study approach allowed for the opportunity to provide a comprehensive view of the teacher preparation program at Leeward Community College, as well as identify barrier and support factors that relate to educational and career goal attainment of students. The second assumption relates to the interpretation of data. It is assumed that the interpretation of interview data is subjective to some degree. Because of the nature of qualitative research, it is anticipated that new understandings of student experiences will occur as the cases unfold. The case study methodology allowed for the emergence of themes and patterns throughout the study to produce unexpected outcomes in the interpretation of the data.

The researcher assumed there are particular factors that relate to the educational and career goal attainment of prospective teachers at Leeward Community College. These factors were unique to the AAT students at Leeward and to their goal of becoming future teachers. The final assumption is that the participants were honest and candid in their survey and interview responses and expressed their views unreservedly.

Limitations and Delimitations of the Study

The research is limited to a specific bounded system (The Associate of Arts in Teaching Program at Leeward Community College) and its participants (former and current students enrolled in the AAT program). The researcher is not attempting to generalize findings to the educational attainment of all prospective teachers of community colleges or across all teacher preparation programs. However, the details of the outcomes will allow researchers and educators to transfer the findings to practices in other community colleges where appropriate. Results of this study may provide readers with ideas to reduce barriers in current teacher education programs at the community college level and ways in which to provide effective supports for underrepresented students, and more specifically for future teachers of Native Hawaiian ancestry.

The population of this study included students enrolled in the AAT program at Leeward Community College from Fall 2009 – Spring 2014. Although the data from the study will not provide an exhaustive list of factors that reduce barriers and provide effective support for prospective teachers, it can provide insight into some factors that influence educational achievement and career goal attainment at the college. The barrier and support factors identified in the bounded system, the teacher preparation program at

Leeward Community College, may impact students' educational achievement and career goal attainment differently than at other institutions.

Some readers may view my active role in the Associate of Arts in Teaching program at Leeward Community College as a limitation. I am also a graduate of the community college at Leeward and a former K-12 HIDOE teacher. I am a Native Hawaiian female, born and raised on the Leeward coast in Hawai'i and the only AAT instructional faculty member of Hawaiian ancestry. Consequently as the investigator, I viewed the study through a specific lens. Because of my experiences as a former HIDOE K-12 teacher and prior knowledge of hiring practices within the HIDOE, I acknowledge my unique position in this study; however do not perceive it as a limitation. In my commitment to avoid researcher bias, frequent self-checks were conducted throughout each phase of the study. I remained constantly open to new discoveries related to factors that may or may not influence educational and career goal attainment for students and consistently followed established research protocol.

Definition of Key Terms and Acronyms

Throughout the study, readers will encounter various terms and acronyms especially in the second chapter within the review of the literature. Listed below are key terms used throughout the study and frequently used acronyms as it relates to this research.

2 + 2 – A partnership or collaboration between a 2 year and 4 year institution of higher education. Students in 2+2 programs work to complete a 4-year baccalaureate

degree by first completing 2 years at the community college level and transfer for 2 additional years at a 4 year institution

2 + 2 + 2 – A partnership or collaboration between high schools, a 2 year and a 4 year institution of higher education. Students in 2 + 2 + 2 programs can start taking education and general core college courses at the high school level, earn community college credits and work to complete a 4-year baccalaureate degree

AAT - Associate of Arts in Teaching/referring to any community college level teacher preparation program

Alternative Certification – A state-defined alternative route to teacher certification and/or teacher licensing

Articulation Agreement – A written policy of agreement between institutions of higher education to confirm the transfer of specific coursework between institutions to obtain a specific degree

Career Goal Attainment - For purposes of this study this is defined as the process of becoming a teacher, including the completion of the first two years of coursework in a teacher preparation program at a community college.

Community College or CC – An open-access public or private two-year institution of higher education

CCRC – Community College Research Center, Columbia Teachers College – research group focusing on two-year institutions

CTE – Career and Technical Education

DOE – Department of Education (Federal)

Educational Attainment – For purposes of this study this is defined as the process of becoming a future teacher, including the completion of the first two years of coursework in a teacher preparation program at a community college.

First Generation – For purposes of this study students who are referred to as *first generation* are first in their immediate family to attend a higher institution of learning

Hawai‘i P-20 – Refers to the partnership between the Executive Office of Early Learning, the Hawai‘i DOE and the University of Hawai‘i system whose goal is to strengthen educational outcomes from early childhood through higher education

HIDOE – Hawai‘i State Department of Education

HQ/Highly Qualified – As defined by the federal government under No Child Left Behind (NCLB) – teachers are HQ if they have 1) attained a bachelor’s degree 2) attained full state license and certification for teaching 3) provide proof of content knowledge

HTSB – Hawai‘i Teacher Standards Board

InTASC – Interstate Teacher Assessment and Support Consortium

K-12 – Refers to the population of students or schools that serve students from kindergarten through grade 12. Within this study the teacher preparation program is referred to as a K-12 teacher education program, since it does not include specific teacher education courses in early childhood.

Leeward/Leeward CC/LCC - Leeward Community College, Pearl City, Hawai‘i

NACCTEP – National Association of Community College Teacher Education Programs is an organization of community college teacher preparation programs and

community partners with the goal of supporting community college teacher preparation and linking support resources between programs

NCATE – National Council for the Accreditation of Teacher Education

NCES – National Center for Educational Statistics

NCTAF – National Commission on Teaching and America’s Future

Non-traditional Student – Any student above the age of 22 years

NSF – National Science Foundation

P-12 - Refers to the population of students or schools that serve students from preschool through grade 12

P-20 – Refers to the population of students or schools that serve students from preschool age through college age of 20 years

TFA – Teach For America

Teacher Preparation Program – A program whose purpose is to prepare future teachers for P-12 or K-12 teaching

Traditional Student – Any student between the ages of 18 and 22 years

Underprepared – For purposes of this study underprepared students are defined as students entering the college level not qualifying to enroll in ENG 100 and/or MATH 100, and therefore must enroll first in remedial level courses

Underrepresented – For purposes of this study, underrepresented students are defined as students entering college level with one or more of the following criteria: Native Hawaiian, other ethnic minority, above age 22, male

Summary

In this case study, the researcher seeks to determine factors that influence community college students' educational and career goal attainment as future teachers. These factors include barriers and support factors that students encounter during the first two years of preparation in teacher education. The research was limited to the Leeward Community College Associate of Arts in Teaching Program, current students, and its graduates. The case study included several groups of AAT students and graduates and will be explained with more detail in Chapter 3.

Chapter 2 will review the current literature related to this study including the K-12 teacher shortage, the role of community colleges in teacher preparation, overview and historical background on the teacher preparation program at Leeward, and Bronfenbrenner's (1996, 2005) theoretical framework applied in this research. Chapter 3 will explain the methodology employed in the study as well as the research design and details about data collection and analysis. Chapter 4 will provide an extensive overview of the data collected in the study through both survey and interview results. Finally, Chapter 5 will highlight specific findings with regard to barriers and supports for students in the Associate of Arts in Teaching Program at Leeward Community College. The final chapter will also specify implications for future research and recommendations for the AAT program.

Chapter 2: Review of Literature

Introduction

The call for community colleges to play a critical role in teacher education has long been echoed. Over a decade ago in 1998, the National Science Foundation (NSF) acknowledged at its nationwide conference, the integral relationship of community colleges in the preparation of teachers of science and mathematics (Moore, 2000). The NSF called upon community colleges to provide pre-teaching experiences for perspective teachers and to provide professional development opportunities for in-service practitioners. The same plea resonated in Illinois when their college board recommended community colleges target high shortage areas and focus on improving articulations with four-year institutions (Gerdeman, 2001). As an entry point for millions of students into higher education, community colleges allow access to a vast population of this country. If we consider the demographics served through two-year institutions, it is undeniable how impactful the CC systems are in terms of access to teacher preparation.

In *Shaping the Future*, the National Science Foundation asserted that a sizeable percentage of future teachers begin their schooling in two-year colleges (Parsons, 2003). These two-year institutions have a clear commitment to teaching and with so many prospective teachers as students, must be viewed more as significant partners in the system of teacher preparation (Gerdeman, 2001). Five years later, in 2006, Leeward Community College answered a similar plea from the HODOE to increase the number of highly qualified Educational Assistants (EA) in the field (Martel, 2013). In that inaugural year, Leeward welcomed its first group of 26 students to the Associate of Arts in

Teaching program. Since then the program has grown tremendously and produced scores of graduates, as this chapter will highlight in more detail.

However as the importance of community college teacher preparation programs increase, the institutions must question *how* programs can improve in order to support their students and decrease teacher shortage issues. Likewise, the issue of *what* measures to take in order to recruit, prepare and retain prospective teachers must be addressed. It is imperative that community colleges provide the necessary support structures for students from the time they begin their first years to the time they are ready to transfer into a four-year teacher preparation program (Allen, 2002). Moreover, community colleges must develop effective programs that prepare prospective teachers and help them attain their educational and career goals. Educational attainment is synonymous with success and achievement. Retaining and supporting students in their first two years is the first step in helping students realize their educational goal of graduation and their career goal of becoming a teacher.

The previous chapter created a roadmap for the direction of the literature review. This chapter is organized underlining the following topics: review of the current literature on the demand for teachers and the K-12 teacher shortage, inequity of teacher workforce and student population, community-centered practices, culturally relevant practices, the role of community colleges in teacher preparation, Leeward Community College's Associate of Arts in Teaching program, indigenous research methodology, and finally a review of Bronfenbrenner's Ecological Systems theory and how it applies to this study.

K-12 Teacher Shortage

A myriad of reasons contribute to the current shortage of highly qualified K-12 teachers. Factors such as the nationwide rise in student enrollment, the continuous increase of retirement and attrition rates, and the lower supply of new teacher candidates in the field, demonstrate the necessity for producing highly effective K-12 teachers (US Congress, 2008). While the current supply of qualified teachers is not adequate to meet the demands of the nation's student enrollment, the number of beginning teachers leaving the teaching career within the first five years doubly impacts it. Ingersoll (2002) maintains that 39% of all novice teachers leave the teaching field within their first five years of employment. These staggering statistics nearly double in lower income communities where teacher turnover rates are sometimes 50% greater than in higher income communities (Ingersoll, 2001). One key point that educators maintain is the need for effective induction and mentoring support for beginning teachers to remain in the field after their first year (Ingersoll, 2012).

Although the percentage of induction programs for beginning teachers has increased over the past decade, induction and mentoring varies at different schools and can therefore have differing impacts on the first year of teaching. The most common form of induction reported by Ingersoll (2012) included face time with an administrator and an assigned mentor teacher. Other school districts and mentor programs included workshops and seminars, time for collaboration with colleagues, an additional resource in the classroom such as a teaching assistant, and in some rare cases, first year teachers were given a lighter teaching load to adjust to the new position. However, it is uncertain to what level new teachers feel supported and prepared and how best to tackle this issue.

Because of the high attrition rates of new teachers and their vulnerability as beginning educators, school districts across the nation must respond to their unique and specific needs (Weiss, 1999). The lack of formal and structured induction and mentoring is one reason that novice teachers decide to resign in the first five years, adding significantly to the continuing teacher shortage (Kaiser, 2011).

Often though, the factors that contribute to attrition are more complex than a lack of new teacher mentoring or teacher dissatisfaction. Teacher turnover across years of experience and spanning K-12 grade levels demonstrate that there are multiple factors that contribute to a teacher's choice to stay or leave the profession (Hancock & Scherff, 2010). According to the 1999 – 2000 School and Staffing Survey (SASS) and 2000 – 2001 Teacher Follow up Survey (TFS) approximately 550,000 teachers left their teaching positions within that year. This accounts for 16% of the nation's teaching workforce. For those who left the teaching profession altogether, they identified leaving factors such as wanting of higher salary and benefits, retirement, child rearing, and the pursuit of a new career. Some of the 16% left their districts and transferred to other schools. The reasons for leaving they identified included student behavior, lack of planning time, heavy workload, and unhappiness with administrative support (Hancock & Scherff, 2010).

High rates of teacher turnover are especially evident in areas serving non-white, lower achieving populations (Ronfeldt et al., 2013). Moreover, attrition rates tend to be as much as 50% greater in higher poverty and lower income communities. With the surge of retirement, loss of beginning teachers within five years of employment and the need to recruit more quality K-12 teacher candidates to meet the needs of the anticipated

workforce demands, many educators cite community colleges as an important source for preparation and supply of new teachers (Gerdeman, 2001).

Inequity between Current Teacher Workforce and Student Population

The disproportion of minority faculty to minority students is a common thread among institutions throughout the globe. In Australia, for example, indigenous faculty are among the lowest employed in universities, and of those who are among university faculty, most teach within the indigenous studies centers (Gunstone, 2009). Within the United States, while K-12 students of color make up more than 45% of the elementary and secondary school population, only 17.5% of the teacher workforce includes teachers of color (Aud et al., 2012). This is a major disproportion between the students of color who make up almost half of the K-12 student body and only 17% of the teachers that might reflect who they are.

The severe imbalance between students of color and those who teach them are reflective in the numbers of the Hawai'i public school system. In the Hawai'i Department of Education (HIDOE), the highest ethnic and racial student populations are Native Hawaiian and Filipino, yet these groups are among the lowest represented demographics in the HIDOE teacher population (Lingle, 2010). The public school teacher workforce in Hawai'i is largely made up of Caucasian and Japanese teachers while the two groups that make up the largest percentage of students are Native Hawaiian and Filipino (Moniz, 2008). Sadly the HIDOE continues to employ a teacher workforce that is disproportionately representative of their student population.

Similarly the highest student populations at Leeward Community College and within the Associate of Arts in Teaching (AAT) program are Native Hawaiian and Filipino. Leeward Community College serves nearly 8,100 students statewide and is the largest Native-Hawaiian-serving institution within the 10-campus University of Hawai‘i system. Of the over 8,000 students enrolled at Leeward CC, more than 46% of them are of either Part Hawaiian or Filipino ancestry. Similarly within the AAT program itself, there is a significant disproportion between faculty and students. While 51% of its students are of Native Hawaiian and Filipino background, only 6 % are Native Hawaiian. In fact among the 15 instructional faculty members in the AAT program, only one is of Hawaiian ancestry, and none are of Filipino background.

These statistics are of significant importance in terms of teacher preparation and the demographic profile of teacher candidates. The disproportion between students and teachers of color must be taken seriously and addressed within teacher preparation programs and educational practices. Educational leaders and policy makers need to turn to community and culturally based programs to ensure that the disproportionate trend between the teacher workforce and minority students is reduced.

Community-centered practices.

An ongoing issue in Hawai‘i is the lack of committed and qualified teachers especially in geographically isolated areas that are often highly populated by Native Hawaiian families (Kawakami et al., 2011). For decades, the HODOE has implemented hiring practices that privilege out-of-state teacher applicants who often only make a two-year commitment to the teaching position and have undergone an alternative pathway for

teacher licensure. Teach for America (TFA) candidates – recruits from exclusive universities who receive only a few weeks of teacher training before entering the classroom – have been perpetually hired in the HDOE as a short-term solution to the ongoing teacher shortage problem. Because these candidates are not highly qualified, commit for only two years, and do not hold teaching credentials, teacher retention is of major concern. A recent study in Houston, Texas reported that not only are these TFA recruits unprepared and undereducated in teaching pedagogy, they are less effective than certified teachers and often leave the profession within the first two to three years (Darling-Hammond, 2000).

Furthermore, on a local level, the TFA candidates are consistently placed in hard-to-fill areas, often within Native Hawaiian and other minority and underrepresented communities. A more effective approach to support underrepresented students and improve the teacher workforce is a community-based effort. Kawakami et al. (2011) argues, “A different approach, one that is long term and comprehensive, recruits teachers from inside communities and is known by program designers as ‘grow your own’ (GYO) teachers” (p. 5). In the state of Illinois, the GYO approach supports underrepresented students and communities by effectively 1) creating a pipeline of highly qualified teachers of color; 2) improving teacher retention in low-income schools; 3) recruiting for hard-to-fill positions; and 4) increasing cultural competency and community connections among teachers (Rasher & Gould, 2012). In a recent review of the GYO Illinois program, results conveyed among numerous other beneficial outcomes, that GYO teachers perceive their greatest strength as their positive relationships with students. GYO teachers indicated that connecting with students and families by having shared race,

ethnicity and culture, positively influenced their teaching and promoted a sense of respect, empathy and a deeper level understanding. The director of GYO Illinois, Anne Hallet, accurately describes her teachers as having passed the “zip code test” (Ramirez, n.d.). In other words, the GYO teachers know the children, they live in the communities, and they understand the challenges of underrepresented students and low-income schools.

Here in Hawai’i, an organized effort to build a core of committed and effective teachers has significantly impacted the academic success of Native Hawaiian and other underrepresented groups along O’ahu’s Wai’anae coast. Through the development of Kūkuluao and Ka Lama Education Academy (KKLEA) and with funding from the Institute of Native Pacific Education and Culture (INPEACE), homegrown teachers from the Leeward coast are returning to their communities as teachers and professional role models (Kawakami et al., 2011). The program involves all stakeholders and community members in the design and implementation process, and provides support to teacher candidates from the community beginning with recruitment to college, retention and teacher licensure. The program provides consistent and ongoing support after graduation from a 4-year teacher preparation program, through beginning teacher mentoring and ongoing continuous professional development through the first three years of teaching.

In addition, the KKLEA model seeks continuous feedback from participants to provide relevant and direct support and collaboration. Using survey feedback and awareness of changing community needs enables coordinators to monitor and deliver the program in a community-centered and culturally relevant way. Researchers employ indigenous methods such as “talk story” (as oppose to formal focus groups) in order to provide data for improvement and growth.

Through the informal “talk story” sessions and survey data, researchers were able to improve services and supports. Four main themes emerged from the initial study that participants identified as challenges in the teaching career pathway: 1) financial and other resources; 2) knowledge; 3) social and emotional factors; and 4) administrative issues. Data from the cohorts provided researchers and program coordinators with information to improve supports and services for future cohorts. This included the development of seminars, cultural activities and the establishment of a community advisory board to guide and develop the program. The systemic effort to produce homegrown teachers from the Leeward coast allows KKLEA to build sustainability within the schools and create a more stable teacher workforce in an area traditionally underserved and overlooked.

Culturally relevant practices.

Other culturally relevant and community-centered programs in Hawai‘i have demonstrated similar positive impact on underrepresented communities. The Hawaiian Academy at Honoka‘a High School on Hawai‘i island began as a pilot project to determine whether culturally relevant and meaningful environments would improve academic and social growth of Native Hawaiian students (Kahakalau, 2004). The Hawaiian Academy approached education through Hawaiian values and practices, and positively impacted over 100 Native Hawaiian students within a three-year period.

Quantitative data such as scores on standardized test, grade point averages and absentee rates were analyzed to demonstrate the effectiveness of the culturally driven curriculum and approach to education. For example, absences decreased 59% among juniors in the program, and test scores improved among 34% of the sophomore students.

Qualitative data derived from “talk story”, student work, and email surveys provided additional information supporting the success of the program. The results of the pilot research provided a framework for Hawai‘i’s first native-designed and controlled public charter school, Kanu o ka ‘Āina.

Culturally relevant pedagogy supports student learning and engagement and provides meaningful learning experiences that connect with students’ backgrounds. Tierney (1999) describes this as cultural integrity in the school setting and defines the positive impact that connection to cultural identity can make in education. He points out “when minority college students are able to affirm their own cultural identities, their chances for graduation increase” (p. 84). In his study of The Neighborhood Academic Initiative (NAI), a program designed to support underrepresented students who attend and graduate from college, he identified that the most significant influence in academic achievement is parent and community involvement. Rather than viewing students’ neighborhoods and culture as impediments to their success, the NAI administrators recognize these entities as critical agents for student achievement.

NAI is an early-intervention program for 7th – 12th graders in low-income urban minority communities of Los Angeles, California. Through concerted efforts to engage parents and community members in every aspect of the child’s education, NAI is succeeding in increasing college readiness among underrepresented children who would otherwise not pursue a post-secondary education. Beginning in 1990 and each year since, approximately 40 African American and Hispanic 7th graders are selected to participate in the program annually. Although approximately 30% of the students who enter NAI at 7th grade drop out by their senior year, the remaining 70% go on to graduate from high

school. Remarkably 60% of those graduates enroll at 4-year universities. Tierney cites three key factors of success of NAI: 1) developing local contexts; 2) affirm local definitions of identity and 3) create academic capital.

An essential component to the program and part of developing local contexts is the required involvement of a family member or guardian for each participating student. Saturday classes support families beginning when the student is in 7th grade and continue through graduation. These classes cover a broad range of topics including creating conducive learning environments at home, how to talk about sex and drugs to teenagers, and the college and financial aid application process. Through these courses, academic “capital” or investment from both family and the student supports the vision of graduation and post-secondary enrollment.

The cultural component of family involvement ensures the educational and social wellbeing of the student from the beginning of the program in middle school, through the college enrollment. Faculty and staff within schools from low-income or inner-city communities are often viewed as disengaged from the families and communities they serve. More often than not teachers who teach in minority and low-income schools do not live in nor interact with the communities. NAI seeks to redefine those terms and engage their faculty and administrators in seminars and activities that involve community and family members to reaffirm the cultural and familial identities of students. Seminars and community events provide an avenue for community, faculty and students to come together and mutually share in the goals of education, cultural integrity and academic and social achievement for underrepresented students.

Community Colleges and Teacher Preparation

To help address the demand for more minority and underrepresented teachers, community colleges are increasingly essential in teacher preparation. Community colleges provide a significant entry point into higher education for approximately 45% of first-time college students, including many first-generation students (Gerdeman, 2001). The necessity for diversity in the teaching workforce has merited interest in and support for community colleges as significant contributors to the preparation of future teachers of color (Zirkle et al., 2006). An analysis of the 2012 report from The National Center on Educational Statistics (NCES) revealed that on a national level, students of color make up more than 45% of the K-12 population, yet only 17.5% of the teacher workforce includes teachers of color.

While access to higher education for underrepresented groups continues to be a necessary effort, community colleges have restructured their focus and have elevated their place on the educational continuum, many of which now include an Associate of Arts in Teaching programs and articulation agreements with four-year teacher preparation programs (Moore, 2000). Many experts agree that the role of Community Colleges is becoming increasingly significant in the field of teacher preparation (Allen, 2002). Community Colleges enroll more than 40% of all undergraduates and statistically enroll the highest proportion of students of color in higher education (Townsend & Ignash, 2003).

Articulation Agreements and partnerships with four-year institutions are prevalent mechanisms to move prospective teachers at the community colleges into the universities and four-year teacher preparation programs (Gerdeman, 2001). These agreements

recommend specific coursework and curriculum requirements for positive outcomes of transfer from a CC to a four-year institution. Historically students from community colleges experienced difficulty transferring to universities and baccalaureate programs. Credentialing institutions often denied acceptance of credits and coursework completed at community colleges.

Other academic barriers among CC transfer students to four-year institutions include registration issues, advising issues, lack of career planning and decreased faculty-student interaction (Lockwood, Hunt, Matlack, & Kelley, 2013). In addition to these challenges, community college transfer students often experience a drop in the GPA (grade point average) within the initial year of transfer. Though, despite the transfer shock phenomena, studies have shown that CC transfer students have far superior graduation rates than their four-year freshmen counterparts (Ishitani, 2006).

The academic barriers are compounded by a lack of articulation with four-year institutions and acceptance of credits and coursework completed at community colleges (Gerdeman, 2001). In recent years, this situation has vastly improved as state teacher education boards and educational leaders have endorsed and encouraged the development of articulation agreements (Anglin, Mooradian, & Hamilton, 1993). These agreements are meant to strengthen the function and purpose of transferring. Often articulations have designated transfer curriculum and dual admission agreements that guarantee acceptance of community college credits into a baccalaureate program. Advocates of 2+2 programs which include the student's first two years of coursework done at a community college, and a seamless transition into a four-year teacher preparation program for the remaining two years, maintain the importance of a higher percentage of minority teachers in the

workforce. These advocates also contend that in order for the 2+2 programs to be successful supports need to be in place for students during their first four semesters of enrollment and the four-year institutions that receive them must also be willing to provide the same support through their graduation (Contreras & Nicklas, 1993).

Associate of Arts in Teaching at Leeward Community College

Recruiting, educating, and retaining highly qualified teachers continue to be a challenge increasingly difficult to meet. The state of Hawai'i institutions of higher education do not produce enough highly qualified teachers each year to fill the need of the HDOE (Lingle, 2010). Because of this deficiency, the HDOE often hire prospective teachers from out-of-state and in most instances hire candidates who have undergone alternative teacher education certification such as Teach for America candidates. Findings from a recent Chamber of Commerce report state that 17% of teachers in Hawai'i received certification through an alternative route, as compared to the national average of 13% (Lingle, 2010). In acknowledging this issue, it is also important to acknowledge the role of community colleges in teacher preparation and to examine the impact of such programs both nationally and locally here in Hawai'i.

The Associate of Arts in Teaching program at Leeward Community College is attempting to address this concern. However, since the program is still in its growing phases, research and literature regarding the effects of the program are lacking. This study will add to the body of literature that considers the impact of community colleges in teacher preparation and will provide specific feedback to Hawai'i teacher preparation programs, as well as offer suggestions for improvement of the AAT program at Leeward

Community College. The findings will offer recommendations to improve on the first two years of teacher preparation of Leeward Community College AAT students and support the recruitment, preparation and retention of prospective teachers.

Community Colleges are attempting to provide more qualified and prepared teachers to their communities with a variety of programs and through statewide articulations with four-year university programs (Allen, 2002). This national effort on the part of Community Colleges is proving to be an influential support to the dire need for adding to the teacher workforce. On the local level in Hawai‘i, the Associate of Arts in Teaching program at Leeward Community College has addressed the issue of teacher shortage, recruitment of local students and the preparation of highly qualified teachers.

In response to a plea from the State of Hawai‘i Department of Education in 2006, Leeward Community College created a post-secondary terminal degree option for Educational Assistants (EA) who failed to meet the *No Child Left Behind* designation of *highly qualified*. In 2009 the University of Hawai‘i Board of Regents permanently approved the Associate of Arts in Teaching Program to “provide a career ladder for those seeking a future in teaching and to address the critical shortage in the teacher workforce specifically in the Leeward and Central districts of O‘ahu” (Martel, 2013). As a terminal degree, the program of study prepares highly qualified Educational Assistants for employment in the DOE. As a transfer degree to a baccalaureate four-year teacher preparation program, the course of study prepares the candidates within their first two years of teacher education and provides extensive advising and articulation with colleges of education in Hawai‘i and abroad. The 62-credit program includes 19 credits of core and elective education courses and 43 credits of general education content.

Enrollment in the AAT program has outperformed initial expectations; beginning with 24 declared AAT majors in the fall of 2006 and over 400 students in the spring of 2013. Table 1 below demonstrates the exponential rise in enrollment over the past six academic years.

Table 1

Increase of Enrollment of AAT Majors by Academic Year

Academic Year	Declared AAT Majors	Percentage of Increase
2006 – 2007	24	
2007 – 2008	131	82%
2008 – 2009	246	47%
2009 – 2010	358	31%
2010 – 2011	387	7%
2012 - 2013	404	4%

The information and data included has been primarily retrieved from UH Management and Planning Support (MAPS) reports and from the UH Banner Operational Data Store (ODS), and can be accessed from the UH Institutional Research and Analysis Office website. The following three tables highlight the most current demographic data of AAT majors during the 2012 - 2013 academic year and list the enrollment by ethnic background, age and gender.

Table 2

Enrollment by Ethnic Background - AY 2012 – 2013:

Ethnic Background	Number of Students	Percentage of Students
African American or Black	6	1%
American Indian or Alaskan Native	2	0%
Caucasian or White	51	13%
Chinese	2	0%
Filipino	82	20%
Guamanian or Chamorro	1	0%
Hispanic	5	1%
Japanese	22	5%
Korean	5	1%
Laotian	1	0%
Micronesian (not GC)	1	0%
Mixed Asian	28	7%
Mixed Pacific Islander	5	1%
Mixed Race (2 or more)	56	14%
Native Hawaiian or Part-Hawn	126	31%
No Data	3	1%
Other Pacific Islander	1	0%
Samoan	7	2%
Total	404	100%

Note: AY – Academic Year

As Table 2 demonstrates, the two highest ethnic populations served by Leeward Community College and the AAT program are Native Hawaiian (31%) and Filipino (20%). These numbers are consistent with the Leeward Community College student population as a whole, with the college serving 26.1% of its student body of Native Hawaiian ancestry and 21.6% of students with Filipino background. The two groups make up the highest racial and ethnic populations in both the college as a whole and in the AAT program specifically. Similarly, the HIDOE student enrollment reveals that 28% of its students are of Native Hawaiian ancestry, and 21% are of Filipino descent.

Combined, these two groups make up the largest student population in the HIDOE, yet these same groups are the lowest represented in the HIDOE teacher population (Lingle, 2010).

Leeward Community College provides several support systems for Native Hawaiian and Filipino students. In 2010, the AAT program hired two Native Hawaiian students as peer mentors to serve students of Hawaiian ancestry. These students were assigned responsibilities that included mentoring, support and academic tutoring. The peer mentor program was aptly named Ho'okele, which refers to the traditional art and science of navigation. Through an encouraging and nurturing peer mentor relationship, Native Hawaiian students were guided along their academic journey and provided educational and social support. In 2011, the AAT program hired two additional mentors of Filipino background to mentor students of Filipino ancestry. Both mentoring programs have demonstrated successful outcomes and have contributed to the growing number of AAT graduates of Native Hawaiian and Filipino descent.

Currently, the program employs a total of six peer mentors. In 2013, three male mentors were hired to offer additional support to male students who make up only 20% of AAT program majors.

Table 3

Enrollment by Gender - AY 2012 – 2013:

Gender	Number of Students	Percentage of Students
Female	320	79%
Male	80	20%
No Data	4	1%
Total	404	100%

As table 3 reveals, the traditionally female-dominated teaching profession is evident in the enrollment by gender within the AAT program. However, a gradual rise in male students choosing a career in teaching is becoming more and more common throughout the nation (Sanatullova-Allison, 2010). Still colleges in general and Leeward Community College specifically must look at strategies to attract, recruit and retain more male students as prospective teachers.

Another recruitment strategy in place is effective partnerships with local high schools. Leeward fosters the 2+2+2 model, which provides support and outreach to local high schools and recruits students within the final two years of secondary school. Many high school programs include the Career and Technical Education (CTE) coursework for teaching. The AAT faculty works closely with local high school programs to recruit future teachers through field experiences involving AAT and high school teacher academy students. The annual Teacher Academy Day held at the Leeward campus offers a day of college experience to local high school teacher academy students. In addition, beginning in the fall 2014, ED100 Explorations in Education will be offered at a select

high school in the Leeward district. Students will earn Leeward Community College credits toward an AAT degree while attending high school. This pilot program will offer insight to AAT and other HIDOE teacher academy programs for future 2+2+2 relationships.

The articulation with high schools is further supported by Leeward's 2+2 articulations with both in-state and out-of-state four-year institutions. Currently, Leeward has articulation agreements with the University of Hawai'i at Mānoa, University of Hawai'i West O'ahu, Chaminade University, University of Phoenix and Western Governors University (Martel, 2013). These articulations provide a seamless transition from Leeward Community College to a four-year teacher preparation program.

Considering that a substantial number of AAT students choose Leeward as a result of teacher academy relationships, the average age of the AAT student is a concern in terms of recruitment. In addition to ethnic background and gender, age is a factor when examining underrepresented groups in higher education and the teaching profession. It is an issue to consider when analyzing recruitment and retention strategies.

Table 4

Enrollment by Age - AY 2012 – 2013:

Age	Number of Students	Percentage of Students
Below 18	13	3%
18 - 25	228	56%
26 - 35	82	20%
36 - 45	44	11%
46 - 55	29	7%
55+	8	2%
Total	404	100%

Table 4 shows that the highest represented age group is between 18 – 25 years, which could include those over 22. Non-traditional students are those who are over the age of 22. Nearly 40% of the students are 26 years old or older. Support services such as individualized counseling and academic advising, The Future Teacher Club, peer mentoring, the writing center, and math tutoring offer support to all of the AAT students and are utilized frequently by the non-traditional students seeking additional support. Overall, support systems in place within the Associate of Arts in Teaching program continue to demonstrate a positive and nurturing two-year experience for prospective teachers.

Indigenous Research Methodology

Explorers, medical practitioners, scientists and hobbyist have poked, prodded, measured and studied indigenous cultures for centuries. Overtime it is research conducted by these very people and their institutions that have been responsible for extracting, storing and controlling indigenous knowledge (Rigney, 1999). It is understandable that indigenous communities are apprehensive when it comes to research within their communities. Indigenous people have been over-researched and over-studied by non-indigenous scholars for generations. Tuhiwai Smith (1999) asserts, “the word itself, *research* is probably one of the dirtiest words in the indigenous world’s vocabulary. When mentioned in many indigenous contexts, it stirs up silence, it conjures up bad memories (and) it raises a smile that is knowing and distrustful” (p. 1). Smith posits that many of the earliest European researchers were not in fact trained scholars, but hobbyists who through their travellers’ tales of ‘cannibal’ chiefs and ‘witch’ doctors, perpetuated the misrepresentation of native peoples to the world.

Because of the enduring negative relationship between native people and Western research, indigenous communities around the world are re-conceptualizing research methods as a practice of decolonization, reclaiming culture, and redefining self-determination (Ormiston, 2010). By taking control of their own destinies and finding solutions to problems from within, indigenous scholars maintain ownership and direction of research practices through developing, approving and implementing such research and positioning themselves as the finders and interpreters of new knowledge (Hart, 2010). The general scholarly community holds a responsibility to address issues such as racist practices and attitudes, ethnocentric assumptions and exploitive research. They must

ensure that research conducted with indigenous communities take into account the views, perspectives and knowledge of such communities (Smith, 1999). Moreover, indigenous scholars are charged with the responsibility to develop new ways of analyzing and critiquing research to identify factors of constructing new knowledge that may be liberating for indigenous peoples (Rigney, 1999).

One of the essential components of indigenous research is respecting and acknowledging traditional epistemology or ways of knowing. While some methodologies view cultural protocol, values and beliefs of communities as barriers to research, indigenous methodologies embrace customs and cultural beliefs as factors that contribute significantly to the findings and are perceived as essential in reporting results (Smith, 1999). By incorporating traditional ways of knowing and being in research practices, indigenous scholars continue the process of decolonization. While methods vary from culture to culture, indigenous research methodologies share some common traits based on the ways in which various communities and people express their knowledge systems. Indigenous methodology involves a respect for the community and individuals who are researched as well as responsible and ethical ways of disseminating information gathered (Hart, 2010).

Another significant component of ethics in indigenous research is a commitment to positive social change for the researched group (Kahakalau, 2004). Tuhiwai Smith (1999) echoes this claim of reciprocity and asserts that research involving native people should always seek to make a positive impact on the group that is studied. Ethically speaking, this is the obligation of researchers when research is conducted within an indigenous community, ensuring it is beneficial to the indigenous population being

studied. Information gathered should benefit the community and have a function (Meyer, 2003). Manulani Meyer affirms, “Knowledge for knowledge sake is a waste of time (p. 57). The need for purpose and function in knowledge prompts researchers to bear the question of how the findings will support the researched community.

In addition to what benefits will result from the study, researchers should also ask how the researcher and researched will interact. Relational ethic and sensibility describes the way a researcher interacts with participants and the extent to which the sharing and reporting of new knowledge are respectful of the indigenous group (Kahakalau, 2004). In her study of the Native Hawaiian Academy at Honoka‘a High School, Kū Kahakalau describes her students, not as participants or subjects of the research, but instead names them “co-researchers” and holds them in high regard throughout the research process. Her involvement of the students and faculty as co-researchers garnered lived experiences from all involved and elicited suggestions for improvement of the pilot educational model. Results from the study provided a community-based indigenous model for the existing Kanu o ka ‘Āina Hawaiian charter school.

The interconnectedness between the researcher and researched is an important aspect of indigenous methodology. From a native perspective, it is not possible to be completely unbiased and objective or free from emotion (Lavalley, 2009). Contrary to Western methodology that expects the researcher to be impartial and neutral, indigenous sensibilities are rooted in relationship and connectedness. Kahakalau (2004) claims, “As a Native Hawaiian I bring to every task my mana, my personal power, which includes all my strengths: physical, emotional, intellectual and spiritual” (p. 4) and argues that it is unnatural to remove one’s personal experiences and opinions from the research process.

Thus, relationships play an important role in indigenous research methodology. She further asserts “The intricate involvement of the researcher in the research process is a distinct feature of indigenous methodology” and explains that it is essential for the researcher to be an active part of the investigation (p. 22). This notion is both appealing and surprising. As researchers we are conditioned, through formal institutional training, to believe that research must be unbiased and detached. We assume from rigorous coursework and instruction that as researchers, we must always write from an objective third-person voice. However after delving deeper into the framework of indigenous research, one realizes that it is possible to be both scholarly and native simultaneously and position oneself in the research as an active and passionate participant.

Relationships in research play a vital role in another Hawai‘i study involving Wai‘anae coast educators. In the study, researchers were both community members and co-teachers of survey participants. The relationships and connectedness between researchers and subjects were paramount, and the Western framework of following a specific system of data collection became secondary (Kawakami et al., 2011). One of their research strategies involved the design of a needs assessment, led and informed by existing teachers on the Wai‘anae coast who were able to identify specific needs and support systems. These teachers were involved as co-researchers and administered surveys among teachers. Because of the previously established relationships, researchers were able to follow-up with respondents and collect a high return of survey data. The study also incorporated the traditional form of “talk story” as a method of data collection, and results of the study informed decisions for providing support and implementation of new services to the indigenous population.

Overall, indigenous research methods encompass native ways of knowing and being, relating and experiencing. It must incorporate decolonizing strategies to minimize inequalities and oppression and should benefit the community being researched. Indigenous researchers have the responsibility to develop new ways of approaching research to demonstrate a respect for and value of traditional ways of knowing and learning, and must commit to social change for the betterment of the indigenous community.

Theoretical Framework: Bronfenbrenner's Ecological Systems

Urie Bronfenbrenner (1996) described the environment as a series of settings and contexts for development and regarded development as a result of relationships between human beings and their settings. The contexts are embedded within five distinctive environmental subsystems that interrelate with one another and with the student to influence development. As shown below in Figure 1, when humans develop, their immediate surroundings have a direct impact on them. Students also have the potential to influence their environments. Thus, human development is a dynamic and reciprocal process (Bronfenbrenner, 1986). Bronfenbrenner's theoretical framework was used in this study to determine how students perceived support and to identify potential barriers that contributed to attaining educational and career goals.

Electronic survey questions were aligned with the theoretical framework. Qualitative interview methods captured students' experiences within the program and were guided by Bronfenbrenner's Theory of Ecological Systems. A crosswalk of interview questions in relationship to Bronfenbrenner's theory is found in Appendix D.

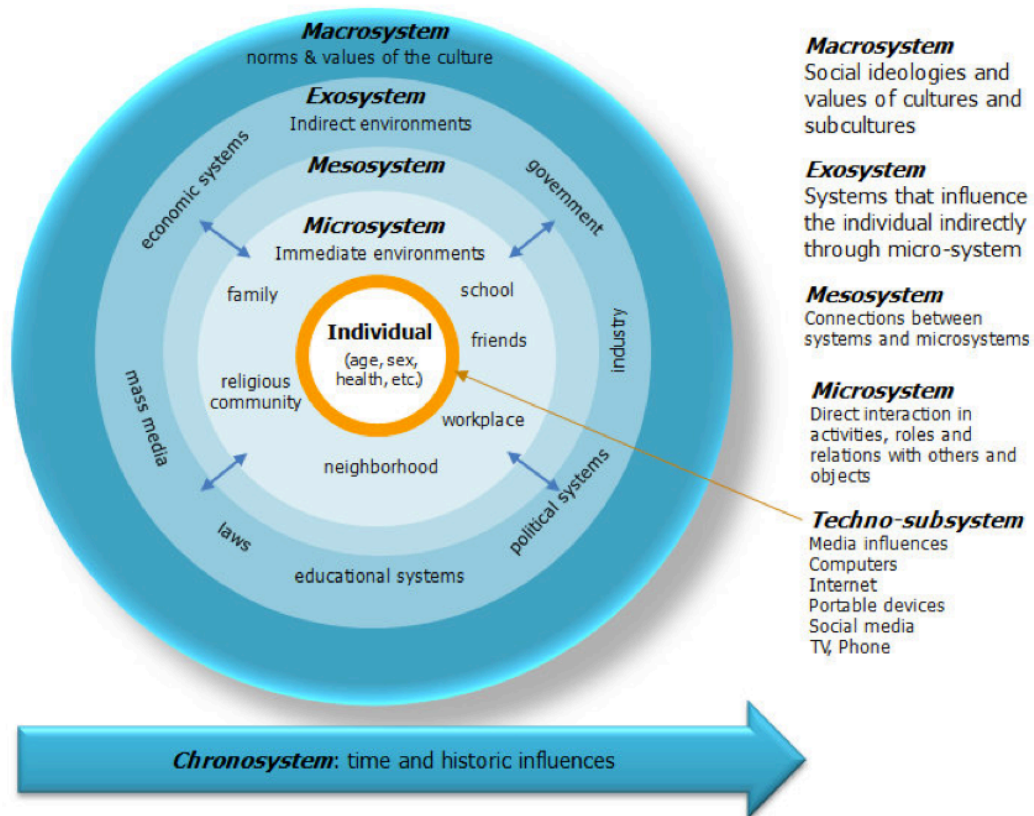


Figure 1 – Diagram of Bronfenbrenner’s Ecological Systems Theory Model (“6. Shaping influences--human development,” n.d.)

The theory emphasizes that the student’s natural setting is not limited to the immediate environment but includes external structures, as well. The first layer of this model is the immediate surrounding called the microsystem, which includes family, friends, school, neighborhood and religion, and is considered the most influential system within the framework. Individuals have direct contact and interaction with this part of their environment (Feinstein, Driving-Hawk, & Baartman, 2009). Most of the student’s behavior is learned within the microsystem and consists of bi-directional influences from parents and peer groups (Bronfenbrenner, 2005).

The mesosystem includes the interconnectedness between the microsystems and bi-directional influences between other subsystems. Examples of this may include the

relationship between instructors and students' family, or the relationship between family and the institution. These relationships are examined in terms of how they impact the individual. The next layer, the exosystem is made up of institutions within society that indirectly affect student development, which might include a spouse's work situation or family's access to education. Although they do not intermingle directly with components of the exosystem, they are directly impacted by the relationships and decisions made within the exosystem (Feinstein et al., 2009).

The macrosystem provides the broad ideological and organizational norms and values of society. Elements include the societal values, beliefs, customs, and rules of the culture within which the child develops. These ideals can influence how parents, teachers, and the community raise a child. This subsystem influences the interaction of all other layers. Examples of this might include an instable economy, political conflict, the media, or innovations in technology. Lastly, the chronosystem includes a wide overview of an individual's life through a socio-historic lens. For instance, divorce rates or a sibling or parent's death might be examined to see how it impacted the student's progress within the program and over a period of time. Each layer is complex, and each layer influences the development of the student. Any conflict within a layer ripples throughout other layers.

While the microsystem has a direct impact on the student's development, the external systems such as the meso-, exo- and macro systems also have a significant impact on the learner's growth and progress. Therefore, it is imperative that the research focus is not limited to the AAT students in their school setting or only in the context of the microsystem, but instead an examination of the external systems additionally

provided a comprehensive representation of the students' experiences of barrier and support factors while enrolled in the program.

Use of this theoretical framework provided the researcher with a clear structure and context to study the varied environments within which students must navigate. Socio-cultural surroundings that support students and their families, as well as influential barriers to educational attainment were examined. The goal of the research was to provide the Associate of Arts in Teaching program at Leeward Community College adequate information from current and former students in order to improve the supports already in place and to increase the recruitment, retention and production of quality future teachers.

Research Questions

The researcher used a qualitative case study approach to answer the following research questions:

Central Question

What are teacher candidates' perspectives on the barrier and support factors that impact their educational and career goal attainment at a community college K-12 teacher preparation program?

Sub questions

1. What factors influence the retention and graduation of Native Hawaiian students in the AAT program at Leeward Community College?
2. What is the role of Leeward Community College in providing access to teacher preparation for underrepresented students?

3. What are the barrier and/or support factors for career goal attainment in teaching for AAT graduates?

Summary

The literature review suggests that community colleges can positively impact the national teacher shortage by recruiting, educating and retaining future teachers. Quality programs in community colleges exist across the nation. These programs thrive by monitoring student progress and making informed decisions about the teacher preparation process. With thoughtful planning, highly qualified faculty and data to support their role in teacher education, community colleges can recruit, retain and prepare quality teachers.

Chapter 3 will discuss the methodology and research design. Qualitative methods employed by the researcher will be explained. The section will include specific research methods used to collect, analyze and interpret research data.

Chapter 3: Methodology

Introduction

The goal of this research was to determine factors that influence the educational and career goal attainment of future teachers at a select community college. A naturalistic case study approach was used in order to study individuals in their usual surroundings (Creswell, 1998). This study surveyed a random sampling (initial program-wide survey of graduates) and interviewed a maximum variation purposeful sample of current students and graduates of the Associate of Arts in Teaching (AAT) program at Leeward Community College. This approach assessed the barrier and support factors that influenced their career goal and educational attainment through a random sampling survey and a purposeful sampling of interviewees. In addition, the research focused on the highest student population group, namely Native Hawaiians, and sought to determine specific factors that affect this particular group of students. A naturalistic case study approach was employed to answer the research questions based specifically on perspectives of students within the teacher preparation program as well as graduates who transferred to 4-year teacher preparation programs. The researcher maintained that the most valuable data must come from those directly impacted – the students and graduates of the AAT program at Leeward.

Additionally, using a naturalistic approach supported data collection and findings. Creswell (1998) states that qualitative research in a natural setting involves the researcher as an instrument of data collection and interpretation. He further states that studying subjects in a “natural setting” provides a context for the study and yields genuine findings (p. 17). Naturalistic research is context-bound, and data are socially and

culturally situated. Consequently, the researcher is part of the researched world (Cohen, Manion, & Morrison, 2007). Naturalistic studies have various forms of inquiry. For this research, a case study design of inquiry was used to provide the richest and most meaningful data in order to determine the barrier and support factors that influence educational and career goal attainment of future teachers.

Furthermore, McMillan (2000) states that case studies produce thorough examination of one or more events, programs, social groups, or other bounded systems rather than generalizing information. This research focused on the unique experiences of a particular group of community college students who completed a teacher preparation program. The study is descriptive in that it provides no comparative analysis or evaluative procedures (Plano Clark & Creswell, 2010). The investigation was conceptually organized around issues pertaining to educational and career goal attainment of students within the teacher preparation program. Educational and career goal attainment of students was based primarily on students' own perceptions of the college and their perceptions and experiences within the teacher education program. Furthermore, since the teacher education program is fairly new and has not previously been studied, the exploratory nature of qualitative design was most fitting (Creswell, 2003). Therefore, a descriptive, issue-driven case study was the most appropriate methodology to employ.

This methodology chapter is organized in the following way: the introduction to methodology, research questions, the case selection, description of procedures, data collection and analysis, quality considerations to include internal validity/credibility, reliability/dependability, and external validity/transferability and a summary.

Research Questions

The researcher used a qualitative case study approach to answer the following research questions:

Central Question

What are teacher candidates' perspectives on the barrier and support factors that impact their educational and career goal attainment at a community college K-12 teacher preparation program?

Sub questions

1. What factors influence the retention and graduation of Native Hawaiian students in the AAT program at Leeward Community College?
2. What is the role of Leeward Community College in providing access to teacher preparation for underrepresented students?
3. What are the barrier and/or support factors for career goal attainment in teaching for AAT graduates?

Case Selection

Participants.

The participants in this study are graduates of the Associate of Arts in Teaching program at Leeward Community College who have a) recently completed all requirements for the program, or b) have completed the AAT degree and transferred to a four year teacher preparation program, or c) have completed both the AAT degree at Leeward and a four year program at a university, and are currently teaching in the Hawai'i DOE school system. The three groups of participants in the study allowed the

researcher to answer research questions through multiple lenses. The “portraits” or student experiences, as Merriam (2009) defines, present individual cases and answers to the phenomenon studied. Later a cross-case analysis was done to suggest generalizations. Data was used to determine how different variables contribute to the educational and career goal attainment of future teachers across cases within the bounded system of the Associate of Arts in Teaching Program at Leeward.

Figure 2 illustrates the sampling criteria employed by the researcher. Selection of participants was based on the three different groups as previously explained. In addition to groups A, B and C, the researcher hoped to find participants of varying age, ethnicity, and with varying living and familial situations to gain a broad perspective of the Associate of Arts in Teaching student experiences. Variation and number of cases provided more meaningful interpretation of results (Merriam, 2009).

Sampling Plan															
	Gender		Age		Ethnicity			Family			Living Situation		Non-school Commitments		
	Male	Female	Traditional Student	Non-traditional Student	Hawaiian	Filipino	Other	Single	Married	Number of Children	Live w/family (no rent or mortgage payment)	Live independently – pay rent or mortgage	Part-time Employment	Full-time Employment	Extracurricular Activities
Group A: AAT Graduates SP2014 (n=2)															
A1															
A2															
Group B: AAT Graduates Transferred and currently enrolled in 4-year teacher preparation program (n=2)															
B1															
B2															
Group C: AAT Graduates, 4-year TP completion; Currently Teaching in a HIDEOE school (n=2)															
C1															
C2															

Figure 2 – Sampling Criteria and Planning Table

The purposeful sample was selected based on two factors. 1) The initial survey and interview participants which included Associate of Arts in Teaching students who have completed the program or are in their final semester and are ready to transfer to a four-year institution; who have recently graduated from the program and are currently

enrolled in a four-year institution; or who have graduated from both the AAT and four-year institutions and currently teaching in a HODOE classroom. 2) The interview participants successfully completed all five of Leeward's required education courses: ED 285 – Classroom Management; ED 290 – Foundations of Education; ED 291 – Developing Language and Literacy; ED 294 – Multicultural Education; and ED 295 – Service Learning.

In addition to completing the program's core courses listed, they fall into one of the three categories listed in the first criteria. Merriam (2009) asserts that maximum variation in the sample (as noted in Figure 2 - sampling criteria) allows for a greater range of application for readers of the study. Choosing participants based on these varied criteria will allow the researcher to comprehensively explore barrier and support factors that influence educational and career goal attainment among future teachers at Leeward Community College, and provides consumers of this research with a higher possibility of generalizing findings to more people.

Description of institution and program.

Leeward Community College was established in Pearl City Hawai'i in 1968, with approximately 1,500 students. Currently, the institution serves nearly 8,100 students and offers 63 different associate degrees and certificate programs. In an effort to respond to the teacher shortage in Hawai'i and to increase the number of highly qualified Educational Assistants in the state, Leeward Community College established an Associate of Arts in Teaching degree program (Martel, 2013). Since its establishment in 2006, the AAT program at Leeward has contributed considerably to the teacher

workforce in Hawai‘i and continues to do so with articulation agreements among several four-year teacher preparation programs statewide (Cabral, 2012). Since 2006, the teacher preparation program at Leeward has grown 1900% from 24 students in the fall of 2006 to over 400 students enrolled in the fall of 2012.

The Associate of Arts in Teaching degree is a 62-credit two-year program including 19 education credits, and 43 general education credits. As previously mentioned, AAT experienced rapid growth and in the summer of 2013 added three additional full-time faculty members to the program. The AAT program also added an accelerated 18-month cohort for students aiming to graduate earlier. In addition the Hawaii Teachers Standards Board (HTSB) officially designated the education program as a State Approved Teacher Education Program (SATEP) to provide alternative certification and state licensure for Career and Technical Education (CTE) teachers.

Procedures

The researcher used multiple sources of information to gather data in an effort to answer the research questions. The following section will highlight the study’s practices such as triangulation of data, document analysis, interview and survey analysis. A crosswalk was used to develop reliable instrumentation for interviews consistent with Bronfenbrenner’s Ecological Systems Theory and is listed in Appendix D. All of these measures will attempt to answer the central question and sub questions of this study.

Data collection.

A case study involves a wide array of data collection as the researcher attempts to

build a comprehensive representation of the case (Creswell, 1998). For the researcher, the first step in data collection began with a document review of archival materials related to the teacher preparation program at Leeward Community College. Documents were analyzed to provide a detailed description of the program, as well as its historical background. Reports from the Office of Institutional Research (OIR) at Leeward Community College were reviewed and summarized to establish enrollment and retention patterns in the Associate of Arts in Teaching program at Leeward. Institutional reports generated from the computerized Banner system were also reviewed for current enrollment and demographic information of education students at Leeward.

Prior to beginning data collection, the researcher contacted both the chancellor Leeward Community College and the coordinator of the Associate of Arts in Teaching Program to gain permission to conduct the study. Samples of the permission requests are included in Appendix H and Appendix I respectively. Once permission was granted, contact was made with the Office of Planning Policy and Assessment (OPPA) at Leeward to establish proper protocol for the study. The OPPA creates policy and procedures for how data is disseminated. In addition, contact with the Office of Institutional Research was made to collect data on AAT students and enrollment. OIR houses data gathered from Leeward Community College for each semester. Data was also gathered from UH Management and Planning Support (MAPS) reports and the UH Banner Operational Data Store (ODS). These resources supported the study with access to demographics, retention and graduation rates, as well as statistical data on the growth of enrollment and successful completion of the AAT degree.

Survey.

A survey was used to determine various influences on educational and career goal attainment of AAT students at Leeward Community College. The survey helped the researcher in determining barrier and support factors within the current AAT student population and among its graduates. From the data gathered, the researcher gained a better idea of student experiences and was able to refine the interview questions. Two separate survey groups were selected. An initial pilot survey was conducted with a small group of 15 students to determine problematic or ill-worded questions. As a result of the pilot study, the following changes were made to the final survey:

1. Drop down menus were converted to multiple choice to provide more specific and detailed summary of results
2. Some of the open-ended questions were converted to drop down menu questions, such as city of residence. This provided a more streamlined group of answers, as oppose to a variety of similar answers. For example, instead of students listing Ewa, Ewa Beach and Pu'uloa in the pilot survey – as different locations, the drop down menu offered all three locations as one choice.
3. In the pilot survey, participants were asked to list the semester and year they planned to graduate from Leeward as well as the campus where they were planning to transfer. The question was later separated into two different categories, and a drop down menu was used for identifying the transfer campus. This provided the researcher with a clear response and limited student transfer campus responses to the following: a) University of Hawai'i West O'ahu, b) University of Hawai'i Mānoa, c) Chaminade University, d) University of

Phoenix, and e) Other. In the second and final survey, the participants were prompted to answer the question as a yes/no response. Then they were prompted to select one of the five choices. This proved a better wording of the survey question because in the pilot, participants were given an open-ended section to list the transfer institution, and many chose to write more information than what was asked such as major or semester of study.

4. The final survey included a specific question about Hawaiian identity. Whereas, in the pilot, participants were asked to list their ancestry, the final survey asked first whether or not the student identified as ancestrally Native Hawaiian (yes/no). If they responded yes, they were asked about their sense of responsibility to their community and whether or not it had an impact on their choice to become a teacher. Responses to the latter question informed the researcher of student perspectives and helped shape one of the interview questions to address this topic and answer one of the research sub questions.

The survey was distributed electronically to all fall 2013 and spring 2014 AAT graduates, with a total of 76 surveys sent. A sample of the final survey is located in appendix F, along with the accompanying consent form in appendix E. Three return emails were sent back with invalid emails. Of the 73 remaining students polled, 51 students responded. Chapter 4 will provide an in-depth analysis of the results, including select quotes and narrative responses.

Interview.

A standardized online asynchronous interview approach was used in this study as the first process of interview data collection. Use of email interviews have dramatically increased within the last decade, and its viability as a qualitative research method has gained recognition throughout academia (Meho, 2006). Both cost and efficiency are noted as benefits to online interviewing. Researchers can invite a wide range of participants and access a sample of participants who are geographically dispersed via email rather than making long-distance telephone calls or traveling to the various locations of participants. In addition, since participants in this research were either current students, student teachers in a 4-year teacher preparation program, or currently teaching in the DOE, this methodology worked favorably with their professional, personal and academic schedules. Electronic interviews also decrease the cost of transcribing because data from online interviews require little editing or formatting before they are processed for analysis (McCoyd & Kerson, 2006).

Standardized open-ended interviews gathered data for the first round of collection. Using electronic communication for the initial set of responses established the groundwork for follow up interview questions. Kahakalau (2004) indicated that the use of electronic interviewing was especially helpful in her study on the impact of the Hawaiian Academy on Native Hawaiian students. She asserts that electronic interviewing works well with native people because the aspect of “face” is eliminated, and participants tend to be more honest in email responses than face-to-face taped interviews. In many instances when the interviewer and interviewee have a previous relationship, it can have a significant affect on the interview responses. In her research, she explains that electronic responses yielded better responses because students did not

feel they were responding to her as their program director and felt comfortable sharing their perspectives. In this case, I had been an instructor to all of the participants at one time or another in their AAT experience. Utilizing an email as a first step to elicit responses proved to be a fitting entry point.

A semi-structured interview approach was used as a follow up method in this study. Less structured interview designs acknowledge that participants will define their world in unique ways. Semi structured interview formats allow for the researcher to respond to the situation and to the interview as the process continues (Merriam, 1988). The second interview with each participant was conducted either in-person or via electronic video conferencing (Skype). The open-ended nature and flexibility of questions in this type of interview provides a pathway for emerging themes, new ideas on the topic and expression of the emerging worldview of the respondent. As Merriam (2009) notes, this type of interview has several key elements:

- Interview guide includes a mix of more and less structured interview questions
- Flexibility in questioning
- Detailed data required from all interviewees
- Major part of the interview is guided by a list of questions or issues to be addressed
- There is no predetermined phrasing or sequence

Since the researcher sought to uncover the worldviews of her students, and explore the barrier and support factors of educational and career goal attainment, the semi-structured interview design was the suitable approach. This allowed for researcher and respondent to interact in a less methodical, more comfortable setting and permitted various themes

and ideas to emerge. In some cases questions led to students feeling comfortable enough to share their frustrations about particular topics, or explain situations in detail. Two of the interviews took place at the transfer 4-year institutions. Two interviews were conducted via video chat and Skype. One interview took place at Leeward Community College and another at a restaurant in Kapolei. A sample of the interview consent form is located in Appendix E. A crosswalk was created using Bronfenbrenner's Ecological Systems Theory and is located in Appendix D.

Human subjects guidelines.

All human subjects guidelines were adhered to at the time of data collection and analysis. Careful attention was given to matters of anonymity for both the survey and interview data. Sensitivity and ethical conduct guided the data collection stage of the study. Consent forms were dispersed and signed prior to data collection. Additionally, permission from Leeward Community College, via signed consent forms, was obtained prior to the collection of data.

The Office of Institutional Research at Leeward was apprised of all research used and conducted and helped to inform the researcher of policy and procedures for Leeward Community College. In compliance with the University of Hawai'i at Mānoa guidelines for human subjects research, an Institutional Review Board application for exempt status was submitted to the Human Studies program prior to data collection. All forms requesting and receiving permission as mentioned above, are included in the appendix of the study, which include survey consent (Appendix E), interview consent (Appendix G),

institutional consent to conduct research (Appendix H and I) and a copy of the human subjects approval (Appendix J).

Data analysis.

The central research question is: What are the barrier and support factors that impact the educational and career goal attainment of future teachers at a community college K-12 teacher preparation program? Documents, reports, survey responses and interview responses were reviewed and analyzed to answer the research question.

Document analysis.

Document analysis was used to answer the first sub question: What is the role of Leeward Community College in providing access to teacher preparation for underrepresented students? The bounded system studied in this case is the teacher preparation program at Leeward Community College. Creswell (1998) maintains that in-depth data collection involving multiple sources of information rich in context will provide for a comprehensive study. Reviewing reports and documents relating to Leeward's AAT program established a rich description and detailed view of the program over time. In addition, the use of this unobtrusive data provided a general overview of the program, independent of interview or survey participants' interpretations (Hatch, 2002). The nonreactive nature of unobtrusive data allowed for exposure of unequal student demographic proportions. The specific documents that were analyzed included:

- College catalogues to provide descriptions of the required courses and certificates offered in the program; computerized Banner system reports (retrieved with permission by OIR) to provide historical and current demographic information about students in the education program
- Transfer checklists and graduation reports to demonstrate the articulation agreements with four-year institutions and provide information on graduation and transfer
- Marketing material to provide information on various programs within the AAT umbrella; grant reports to describe efforts to recruit, retain and prepare teachers
- Education division correspondence to provide detail about Leeward's role in teacher education.

Survey and interview analysis.

Survey and interview responses were summarized and analyzed to attempt to answer the research questions. After survey and interview data had been collected, the researcher looked for similarities in student responses to determine factors that supported and possibly prevented educational and career goal attainment among Leeward Community College teacher education students. Repeating themes were analyzed and noted for conceptual similarities. They were then coded and grouped to provide clear sets of data (Auerbach, 2003). While analyzing findings, the researcher compared and contrasted responses of interviews and surveys with the literature related to students' educational and career goal attainment based on personal factors, instructional factors,

and institutional factors. Transcript analysis was used to find emerging themes and factors. An Interview Crosswalk was created to incorporate and align with Bronfenbrenner's Ecological Systems Theory and is located in Appendix D.

Quality Considerations

Validity/credibility.

Many researchers argue that the term validity does not appropriately reflect qualitative studies. Some propose that *understanding* rather than validity is more suitable asserting that, in qualitative research, we can not be completely objective because we are part of the world we research. Thus, other people's perspectives are equally valid as our own, and the task of the investigator was to uncover these insights. Other researchers argue for *descriptive validity* in qualitative studies, which is the factual accuracy of the account, that is not made up, selective or distorted (Maxwell, 1992). The notion of truth or revealing what actually happened contributes to the validity. In this study, the research aim was to uncover participants' views and perspectives of the teacher education program; therefore the notion of truth and descriptive validity is relevant.

Triangulation, the use of multiple data sources, provided credibility for this case study. This process of corroborating evidence about a finding from different individuals or types of data (Plano Clark & Creswell, 2010) was used by the researcher through collection and analysis of survey and interview responses as well as document analysis. These separate lines of evidence provided the researcher with several ways to find emerging themes and patterns.

Guba and Lincoln (1981) recommend that researchers take interpretations of data back to the participants and asking if the results are plausible. This is referred to as member checking and should be done throughout the study (Merriam, 1988). Member checks added to the credibility of the study and was conducted by the researcher frequently throughout data collection and analysis. This included member checking after the electronic interview and frequent checks during the in-person or Skype follow-up interview. For example, if the response to a question seemed unclear, the researcher would repeat it back to the interviewee.

Reliability/dependability.

Reliability refers to the extent to which the study's findings can be replicated (Merriam, 1988) and assumes that if the study is repeated it will yield the same results. In qualitative research, replication can be difficult when the issue studied relates to human behaviors or experiences. Merriam (2009) states "reliability in a research design is based on the assumption that there is a single reality which if studied repeatedly will give the same results" (p. 170). However, qualitative research seeks to describe and explain the world as those in the world interpret it. Because there are varied understandings of what is occurring, there is no one standard or benchmark to use in order to replicate studies and produce similar results. In its traditional sense, reliability is a *misfit* when applied to qualitative research (Lincoln & Guba, 1985).

Instead of reliability, Lincoln & Guba (1985) suggests gaining dependability of results obtained from the data. In other words, rather than demanding that other researchers get similar results, one wishes outsiders to agree that, given the data gathered,

results make sense and are consistent and dependable. For this particular study, research techniques were used, and data analysis methods employed to ensure dependability and consistency. In accordance with Merriam (2009), the researcher confirmed reliability through the dependability of instrumentation, triangulation and analysis.

External validity/transferability.

External validity indicates the extent to which findings can be generalized, and results can be transferred and applied to another study (Merriam, 2009). Guba and Lincoln (1981) assert that there is a distinct difference in the way qualitative studies approach transferability and external validity, with the way it is defined in quantitative or experimental designs. Many scholars of research argue that generalizability is not the goal in qualitative research design. Instead, as Merriam (2009) affirms, “In qualitative research, a single case or small, nonrandom, purposeful sample is selected precisely because the researcher wishes to understand the particular in depth, not to find out what is generally true of the many” (p.224).

For this study, the researcher gathered data from a maximum variation purposeful sampling. It was the goal of this research to use multiple data sources and vary the sampling for participants so that the external validity of the study gave the reader an awareness of the barriers and support factors faced by prospective teachers within the AAT program at Leeward Community College. It provides consumers of the research with *rich* or *thick* descriptions and yields results that provide detailed accounts of the setting and participants (Maxwell, 2005). This strategy was used to enable transferability

by providing results with adequate evidence presented in the form of quotes from the participant interviews, and statistical information from surveys and document analysis.

Summary

This chapter described the research methodology and research procedures related to the naturalistic case study. The research issues were addressed in terms of case selection, sampling criteria, data collection, data analysis, and quality considerations. The following chapter, Chapter 4 will report the findings of the study, to include a detailed description of the case and student demographics. The chapter will review the survey and interview results and discuss triangulation of data. A focus on specific barriers and factors of support for current and former AAT students at Leeward will be examined as well as experiences of students transferring to a 4-year teacher preparation program and current teaching assignments of former AAT students.

Chapter 4: Findings

Introduction

The purpose of this qualitative case study was to gain an understanding about the experiences of students who participated in the Associate of Arts in Teaching Program at Leeward Community College. This dissertation research involved one central question and three sub-questions that were explored using document analysis, surveys and a series of interviews. The questions to be answered were:

Central Question

What are teacher candidates' perspectives on the barrier and support factors that impact their educational and career goal attainment at a community college K-12 teacher preparation program?

Sub questions

1. What factors influence the retention and graduation of Native Hawaiian students in the AAT program at Leeward Community College?
2. What is the role of Leeward Community College in providing access to teacher preparation for underrepresented students?
3. What are the barrier and/or support factors for career goal attainment in teaching for AAT graduates?

The central question centers on students' perceptions of their experiences and factors that impacted their educational and career goal attainment. This question is addressed through individual interviews and surveys. The sub-questions relating to retention and graduation of Native Hawaiian students, providing access, and supports and barriers were

addressed through survey and interview data. The section is organized in the following way: introduction, survey results, interview results, triangulation of data, and summary.

This section provides an overview of the findings from the study and helps to identify major themes that emerged from individual interviews and surveys with a total of 57 participants from the Leeward CC Associate of Arts in Teaching Program. The interview sample was comprised of six program completers: four women and two men. As stated in the previous chapter, the interview participants were at various stages of educational and career goal attainment: Group A) recent AAT graduates; Group B) AAT graduates currently enrolled in a 4-year teacher preparation program; Group C) AAT and 4-year teacher preparation graduates currently teaching in the HODOE. Survey participants consisted of 51 AAT graduates: 44 female and seven male. These survey participants graduated from the AAT program between spring of 2013 – spring of 2014.

Both survey and interview participant samples reflect the lack of gender diversity in the AAT program overall. Participants ranged in age and academic preparedness as well as in ethnicity, family and work responsibilities. Additional demographic information about the participants can be found later in this chapter.

Survey Results

The research population is highlighted in the student profile below. The survey population consisted of 51 AAT graduates from Fall 2013 and Spring 2014. All 51 participants completed the electronic survey (Appendix F) to determine the barriers and support factors that influence educational and career goal attainment at Leeward CC. Table 5 shows a profile of demographics for the research participants who completed the survey.

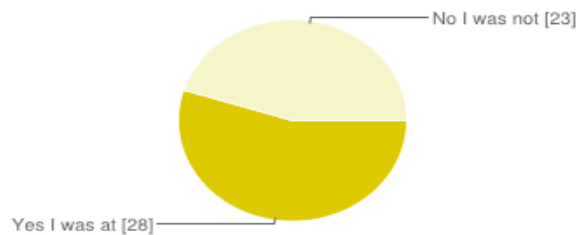
Table 5

Demographic Profile of Survey Participants

Demographic Category	Number of Students	Percentage of Students
Gender		
Male	7	4%
Female	44	86%
Age		
Traditional (18 – 22yrs)	17	33%
Non Traditional (22+yrs)	34	67%
Marital Status		
Married	15	29%
Single	33	65%
Divorced	3	6%
Students with Children		
None	34	67%
1	3	6%
2	8	16%
3 or more	6	12%
First in Family to Enroll in College		
Yes	18	35%
No	33	65%
Received Financial Aid		
Yes	34	67%
No	17	33%

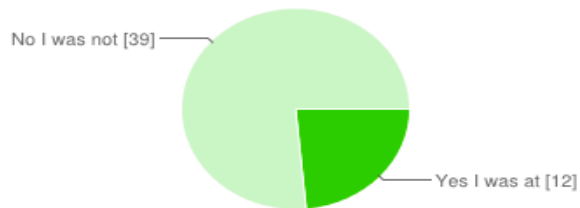
The demographic profile of survey participants indicates that 86% were female, and majority of students (67%) were non-traditional, or over age 22. Note that the demographic profile accounts for graduates of the program, and that data will differ from the set of data discussed in Chapter 2 that describes demographic profile of all students enrolled in the AAT program. 34% of survey participants have at least one child and 35% indicate they are the first in their families to enroll in college. Most students (67%) received financial aid. Figure 3 below illustrates the academic preparedness of participants with an overwhelming 76% who indicated they were not at Math100 level upon admission.

During your first semester of enrollment at Leeward, were you at English 100 level?



Yes I was at English 100 level	28	55%
No I was not ready to enroll in English 100	23	45%

During your first semester of enrollment at Leeward, were you at Math 100 level?



Yes I was at Math 100 level	12	24%
No I was not yet ready to enroll in Math 100	39	76%

Figure 3 - College English and Math Preparedness

Table 6

Reasons for Choosing Leeward Community College for the First Two Years of Education

Reasons	Number of Students	Percentage of Students
Tuition Cost	41	19.5%
Close to Home	39	18.5%
Scholarship	5	2.4%
Small Class Size	21	10%
Course Offerings	22	10.4%
Self-Improvement	4	1.9%
Complete an AA Degree	31	14.7%
Change Careers	6	2.8%
Transfer to a 4 Year Institution	33	15.6%
Complete a Certification	0	0%
Obtain Job-related Skills	4	1.9%
Obtain Specific Content Knowledge	2	.9%
Other	3	1.4%

*Note: Participants were asked to select all that apply

Students indicate that location and cost of tuition were the top two reasons for choosing Leeward Community College. The goal to transfer to a 4-year institution was the third most selected reason. Small class size, course offerings and the goal of completing an Associates degree were also common reasons for selecting Leeward.

Table 7
Student Preparedness and Time Management

Demographic Category	Number of Students	Percentage of Students
Number of Hours Student Works in a Week		
1 – 20 hours	20	39%
21 – 39 hours	16	31%
40 hours or more	5	10%
Unemployed	10	20%
Number of Credit Hours Enrolled per Semester		
3 – 9 credits (part-time)	15	30%
12+ credits (full-time)	36	70%
Enrollment Status		
Continuous	45	88%
Periodic	6	12%
Grade Point Average		
3.0 – 4.0	50	98%
2.0 – 2.9	1	2%
Lower than 2.0	0	0%
English 100 Level During First Semester of Enrollment		
Yes	28	55%
No	23	45%
Math 100 Level During First Semester of Enrollment		
Yes	12	24%
No	39	76%

Table 7 shows that 80% of Leeward Community College AAT students work at least part-time. Only 20% are not employed. 41% work more than 20 hours per week while simultaneously attending college. Most participants (88%) were continuously enrolled without intermittent breaks between enrollments, and 98% of survey participants earned at least a B average, between 3.0 and 4.0. Nearly half of the students (45%) were not at English 100 level upon entering the program. Additionally, only 24% of students were ready to take Math 100, leaving 76% in need of remedial math courses before progressing. Later in the chapter, a parallel will be uncovered with interview participants about academic preparedness and remedial courses.

The two highest populations shown in Table 8 below are Caucasian and Japanese. Compared to the Table 2 statistics, which show Native Hawaiian and Filipino as the highest enrolled, this table, which lists ethnic background of graduates who completed the study, reveals Caucasian and Japanese as the highest represented. The problem to consider here is the success rate of minority students in post secondary institutions versus the number of minority students enrolled. A more thorough examination of this topic will be presented in Chapter 5.

Table 8

Demographic Profile of Student Ethnicity Background

Ethnicity	Number of Students	Percentage of Students
African American	6	5.4%
Caucasian	23	20.7%
Chinese	12	10.8%
Filipino	19	17.1%
Hispanic	4	3.6%
Native Hawaiian	15	13.5%
Native American	3	2.8%
Japanese	20	18%
Korean	2	1.8%
Samoan	2	1.8%
Micronesian	1	.9%
Other Asian	1	.9%
Other Pacific Islander	2	1.8%
Other	1	.9%

*Note: Students were asked to check all that apply

Table 9

Influencing Factors Relating to Teacher Education Program

Category	Number of Students	Percentage of Students
Number of Students transferring to a four-year teacher education program:		
Yes	49	96%
No	2	4%
Number of students with all Leeward credits transferring to a four-year institution:		
Yes	43	84%
No	5	10%
Not answered/not applicable	3	6%
Number of students who met with a Leeward advisor regarding transfer requirements:		
Yes	48	94%
No	3	6%
Number of students who know what is required for transfer to a 4-year teacher education program:		
Yes	44	86%
No	6	12%
Not Answered	1	2%

It appears that most students (96%) plan to transfer to a 4-year teacher preparation program and 48 of the 49 students who indicated transfer plans also indicate that they have met with an advisor to discuss requirements for transfer. Although 84% of the population indicates that all of their Leeward CC credits transfer over to the four-year

institution, 16% of the population either answered “no” or did not answer the question related to transfer coursework.

Table 10 below shows students’ perceptions and persistence and how it influenced educational and career goal attainment.

Table 10

Personal Influences in Educational and Career Goal Attainment

Perception	Number of Students	Percentage of Students
Students’ perception of their confidence or persistence in achieving their educational and career goals:		
Very confident or persistent	38	75%
Somewhat confident or persistent	13	25%
Not at all confident or persistent	0	0%
Students’ perception of their own personal study habits:		
I have excellent study habits	16	31%
My study habits are ok	30	59%
I have poor study habits	5	10%

Note that all students felt “very” or “somewhat” confident in achieving their educational and career goals, yet most believed their study habits were “ok” rather than “excellent”. Only 5 students reported having “poor” study habits. Note that all of the students were recent or very soon-to-be completers of the AAT program. Their

perception of study habits and persistence may be influenced by recent feelings of success and achievement from completing their degree.

Survey questions 18 – 23 correspond to both instructional and institutional factors related to students’ educational and career goal attainment at Leeward Community College. These survey questions asked students to evaluate the quality of instruction, the relevancy of their coursework, and the helpfulness of faculty and counselors. Tables 11 and 12 show students’ responses to the survey questions.

Table 11

Instructional and Institutional Influences in Educational and Career Goal Attainment

Item	Number of Students	Percentage of Students
Quality of instruction in education courses:		
Excellent quality	46	92%
Average quality	4	8%
Poor quality	0	0%
Relevance of education courses to future plans in teaching:		
Very relevant	46	92%
Somewhat relevant	4	8%
Not at all relevant	0	0%
Quality of K-12 field experience in education courses:		
Excellent quality	44	86%
Average quality	6	12%
Poor quality	1	2%

Table 12

Instructional and Institutional Influences in Educational and Career Goal Attainment

Item	Number of Students	Percentage of Students
Helpfulness of faculty to students in achieving their educational and career goals:		
Very helpful	49	96%
Somewhat helpful	4	2%
Not helpful	0	0%
Helpfulness of counselors/advisors to students in achieving educational and career goals:		
Very helpful	48	94%
Somewhat helpful	3	6%
Not helpful	0	0%

Tables 11 and 12 uncover that most students are satisfied with the quality of instruction and the helpfulness of both faculty and counselors and that all students find the faculty and staff to be “very helpful” or “somewhat helpful” to them in achieving their educational and career goals at Leeward. Most students stated the advisors and counselors were very helpful, with the exception of three students who indicated they were “somewhat” helpful.

Survey questions 24 through 26 relate specifically to institutional resources that may influence students’ educational and career goal attainment at Leeward. Question 24 and 25 relate directly to resources while question 26 relates to course scheduling and

availability. Institutional, instructional and personal support services were addressed in question 24 of the survey and is highlighted in table 13.

Table 13

Influences in Educational and Career Goal Attainment

Type of Resource	Number of Students	Percentage of Students
Leeward resources used by students to support their educational program:		
Institutional Support services		
Computer Labs	20	8%
Library/Learning Commons	38	16%
Learning Resource Center	19	8%
Financial aid services	33	14%
Academic advising	28	12%
Counseling services	20	8%
Hālau ‘ike o Pu‘uloa	7	3%
Ho‘oulu	2	1%
Instructional Support Services		
Math Lab	17	7%
Writing Center	19	8%
Peer Mentor	17	7%
Personal Services		
Student Organizations	5	2%
Special Needs Center (Kī Office)	2	1%
Job Prep Services	9	4%

*Note: students were asked to check all that apply

Note that question 25 is open-ended and asks students to identify any additional resources necessary at Leeward to support their education program. There were only six responses to this question and they are displayed in table 14.

Table 14

Influences in Educational and Career Goal Attainment

Type of Resource	Number of Students	Percentage of Students
Open-ended responses for additional resources to support students' educational program		
Institutional Support Services		
Ka Lama	1	16.6%
UH Mānoa mentors "to prepare students for transition"	1	16.6%
Personal Support Services		
Study Groups	2	33.6%
Future Teachers Club	1	16.6%
Class mates	1	16.6%
Number of students who feel classes are offered during days and times that work well with their schedule:		
Yes	49	96%
No	2	4%

The next few tables, 15 – 17 will show the influential factors that were perceived as barriers by AAT students. Survey question 36 was an open-ended question asking students to list any additional factors not included in the survey, that they perceived as barriers. The barriers were categorized into three different themes: institutional, instructional and personal barriers. Of the 51 students who completed the survey, 45 students responded. The responses have been altered slightly for grammatical correctness and abbreviating; however the meaning of each expression remains the same. Table 15 highlights institutional barriers, table 16 shows instructional barriers and table 17 includes personal barriers and other student comments. Similar student responses are not repeated, however the frequency of responses is recorded.

Table 15

Influential Factors/Barriers to Educational and Career Goal Attainment

Barriers	Frequency of Response	Percentage of Total Responses
Institutional barriers:	10	22%
Financial aid, paying for school	8	17%
Parking	1	2%
Availability of Classes	1	2%

Table 16

Influential Factors/Barriers to Educational and Career Goal Attainment

Barriers	Frequency of Response	Percentage of Total Responses
Instructional barriers:	9	20%
Remedial Courses (English and Math) Math	4	9%
Requirements/Courses	3	7%
Taking classes that were not required	1	2%
Some teachers were not helpful	1	2%

Table 17

Influential Factors/Barriers to Educational and Career Goal Attainment

Barriers	Frequency of Response	Percentage of Total Responses
Personal barriers	23	51%
Time Management Issues:	19	42%
Balancing family, work and school	15	
Mostly myself (study habits)	2	
Service learning	1	
Class scheduling	1	
Financial Issues:	2	4%
Paying for school	1	
Lack of Financial aid	1	
Self Perception:	2	4%
Lack of self-confidence	2	
Other Comments:		
None/No barriers	2	4%

The most frequently mentioned institutional barriers relate to financial aid and paying for tuition. While 67% of survey participants received financial aid, finance is still identified as a major barrier. Moreover, 80% of students work at least part time, and 31% of students work at least 21 hours per week while attending classes at Leeward.

Many students mentioned difficulty with managing all of their responsibilities while attending school. One participant said,

“Having to time manage work, school, and home life is probably the most difficult thing I've had to endure this semester. But time management itself has always been my downfall. I am a huge procrastinator and wait until the day or week before an assignment is due.”

Another student noted, “There were a lot of barriers that stood in the way, like how to manage my time between work and school and which was more important”. As indicated in the previous section many AAT students work at least part time. This respondent specified, “Going back to school as an older student and working full time” as barriers to educational and career goal attainment. It is also noted that two students mentioned “no barriers” even when the question specifically asked for barriers.

In the following open-ended question, students were asked to identify factors of support. Although there were only 51 participants, a total of 59 open-ended responses were entered. This means that in multiple instances, a student entered more than one response as a support factor. Tables 17 – 19 highlight institutional, instructional and personal support factors that contributed to students’ educational and career goal attainment. As noted in the three previous tables, responses were slightly altered for grammatical correctness and abbreviating.

Table 18

<i>Influential Factors/Support for Educational and Career Goal Attainment</i>		
Supports	Frequency of Response	Percentage of Total Responses
Institutional Supports	26	44%
Academic Advising/Counseling	18	31%
Financial aid/scholarships	2	3%
Peer mentors	2	3%
Social clubs	2	3%
Ho‘oulu	1	2%
Distance ED/Online classes	1	2%

An overwhelming 31% of responses indicate that academic advising and counseling were support factors for students. In multiple instances the specific advisor’s name was referred to and described frequently in positive ways. One respondent noted “She completely supports you and welcomes you every time you see her”. Another commented, “she always gives me the proper information needed and is genuinely concerned for my future and career plans”. Out of 59 responses, 18 (31%) referred to the academic counselor for the AAT program. The following participant, although highlighting advising in the program as a support, refers to both counseling in the AAT program and the experiences currently at the transfer institution:

“She’s the best thing ever. The university I go to now does not employ an education-specific counselor. I have gone through several loops because the

counselors here have no idea what they need to do for my degree. Even taken classes at my university that did not end up counting towards my BA. Waste of time and tuition.”

Table 19

<i>Influential Factors/Support for Career and Educational Goal Attainment</i>		
Supports	Frequency of Response	Percentage of Total Responses
Instructional Supports	19	32%
AAT Faculty Support	17	29%
Field Experience	1	2%
Study groups	1	2%

Another high marker is the response rate that indicated faculty as a support factor. Of the 59 responses, 17 (29%) noted AAT faculty as a support to career and educational goal attainment. One participant noted, “Our AAT teachers were very supportive and still are till this day”. Comments often regarded AAT faculty in a favorable manner, as one participant stated, “The AAT instructors are the greatest supports that I have received throughout my semesters here at Leeward CC. They are always there to answer my questions and help me plan my future classes”.

Table 20

Influential Factors/Support for Career and Educational Goal Attainment

Supports	Frequency of Response	Percentage of Total Responses
Personal Supports	9	17%
Family	7	12%
Friends/classmates	2	3%
Location/close to home	1	2%

Students note family and spouse as the number one personal support factor. Some identify friends and classmates as supports as well. Overall, the survey provides a comprehensive synopsis of AAT graduates from Fall 2013 – Spring 2014 and demonstrate the supports and barriers of these 51 students. Results from the survey will be triangulated with interview results and document analysis to answer the research questions.

Interview Results

Six interview participants were selected to be involved in two rounds of interviews. As mentioned in the sample criteria in chapter 3, each participant met the following criteria: 1) recent graduates of the AAT program at Leeward; or 2) graduates of AAT at Leeward and enrolled in a 4-year teacher preparation program; or 3) Graduated from both AAT and a 4-year institution and currently teach in the HIDOE. The first round of interviews consisted of ten open-ended questions related to students' experiences at Leeward. This was conducted electronically. Students were given the

opportunity to include any additional information or comments they felt were relevant to the interview discussion and topics in addition to the ten structured questions. A follow up interview with each participant was conducted either in-person or via electronic video conferencing (Skype). The tables that follow show a summary and categorization of student responses to each of the interview questions and additional follow up questions, as well as student quotes and other student comments.

The next section will show results of all 12 interviews. Table 20 shows a demographic profile of interview participants. The following tables will also provide a summary of student responses and select student quotes for each of the interview questions.

Table 21

Demographic Profile of Interview Participants

Demographic Category	Number of Students	Percentage of Students
Gender		
Male	2	33%
Female	4	64%
Age		
Traditional (18 – 22yrs)	1	17%
Non Traditional (22+yrs)	5	83%
Marital Status		
Married	4	64%
Single	2	33%
Divorced	3	6%
Students with Children		
Yes	5	83%
No	1	17%
First in Family to Enroll in College		
Yes	1	17%
No	5	83%
Academic Preparedness: (English/Math 100 Level)		
Yes	0	0%
No	6	100%

Table 21 shows the demographic profile of the interview participants. Note that all but one of the participants has children. Five out of six are non-traditional, and all six participants were academically underprepared at not ready to take either English 100 or Math 100 level courses at the time of entry into Leeward Community College. Interview question one gives an overview of the participants in terms of student goals. The question was: What are your personal, educational and future career goals? Table 22 highlights student responses and frequency. To provide readers with a more detailed view of student responses, Table 23 specifies select student quotes regarding this question.

Table 22

<i>Student Goals</i>		
Type of Goal	Frequency of Response	Percentage of Participants
Personal		
Raise a family/home/marriage	3	12%
Take care of my family	2	8%
Better myself	2	8%
Be involved with community and/or church	2	8%
Educational		
Masters Degree	5	20%
Maintain a 3.0+ GPA	2	8%
Get through school/graduate	2	8%
Future		
Be a good teacher	3	12%
Teach at the college level	3	12%
Return to school for Early Childhood degree	1	4%

Two of the six participants mention the aspiration to teach at the college level, and one specifically mentions returning to Leeward Community College to teach in the AAT program. It is also worth noting that five of six participants expressed the desire to go beyond the baccalaureate level and earn a master's degree. Half of the participants indicated that having a family and getting married were important personal goals.

Table 23

Student Quotes for Interview Question 1

Student Goals

- My goal is to uphold a GPA above 3.0 – I always believed in striving for the best, and not doing the bare minimum...I believe by striving for the best, I'm setting a good example for my keiki and peers
 - I wanna get my masters, not sure what kind but I know I wanna definitely continue my education after my bachelors
 - I would go back to school and get my early education degree because I truly love working with preschoolers
 - My goals are much harder to reach as I build my family at the same time, but that doesn't stop me from pursuing what I love most. My goal is to pass Praxis II and enter student teaching by spring 2015
 - I loved being here at Leeward, the AAT team and the support made me feel inspired to come back and teach other teachers too. That would be my ideal job, working with all of you guys
 - I wanna eventually, after many years teaching in the classroom, move into positions that affect multiple classrooms – like curriculum coordinator, resource teacher, or even administrator or college instructor.
-

Student goals include maintaining high academic standing, pursuing degrees past the baccalaureate, teaching at the college level and working with other teachers in a curriculum coordinator or administrative role. The following two tables highlight responses for question 2: Do you have any role models? In other words, what influenced your career choice to attend college and become a teacher?

Table 24

Influence in Teaching as Career Choice

Influence	Frequency of Response	Percentage of Participants
Previous job working with children	3	37.5%
Former Teacher	1	12.5%
Parent	1	12.5%
Taking an education course	1	12.5%
Myself	1	12.5%
Other family member	1	12.5%

Half of the participants indicated that working with children in a previous job attributed to their career choice of teaching. While only one participant noted a former teacher as an influence in teaching as a career, in informal conversations with these students, all have recognized the characteristics of a great teacher in relation to a former K-12 educator in their lives. Table 25 lists select student quotes relating to this interview question.

Table 25

Student Quotes for Interview Question 2

Influence

- I never had a role model but after attending LCC and establishing bonds with certain instructors, made me look up to them, and guided me to the teacher I want to become
 - My father is my biggest influence cause he was the first to go to college and graduate from our family and he got his masters in education, that was a huge influence
 - I started working at YMCA and that sparked my interest
 - My daughter was what gave me the ultimate “you need to get your life together” attitude to push forward
 - One of my aunties told me I would make a good elementary teacher. I was a gymnastics coach and I thought it was the best job in the world
 - My role models were actually the first children I worked with, 8 – 9 year olds in my community, from one of the rougher areas in Nanakuli
-

50% of the participants reported that their previous experiences working with children were important factors in choosing teaching as a career pathway. They also indicated that past teachers and family members played an integral role in their career choice. Table 26 highlights how participants’ perceived family support and attitudes toward their schooling.

Table 26

Student Quotes for Interview Question 3

Family Attitude Toward Schooling and/or Teaching

- When I returned to school I was married with three kids. It wasn't easy juggling home and school, but my family was supportive
 - They're always asking how I'm doing
 - My parents and fiancé are very involved and very positive
 - My family is really involved, may not be financially, but emotionally they are, especially when I'm stressed out about homework
 - They couldn't support me financially but they all believed in me
 - I come from a long line of teachers, so naturally my mom was hesitant about my decision to become a teacher, with her own experiences working in the DOE...but they have supported me 100% in all of my education
-

During informal conversations with participants and in some interview responses, many noted that juggling family and school was a major barrier. Despite their perception of demanding work, family and school schedules, Table 26 demonstrates that students feel supported by family members and their attitudes toward schooling. Table 27 and 28 lists interviewees' reasons for choosing Leeward as their institution for teacher preparation.

Table 27

Reasons for Choosing Leeward

Reasons	Frequency of Response	Percentage of Participants
Location	5	46%
AAT Program	2	18%
Cost/Tuition	2	18%
Liberal Arts Degree	1	9%
Admission Requirements	1	9%

Location seems to be the most frequent response to reasons for choosing Leeward Community College. Four of the six participants attended at least one class at the Leeward CC Wai‘anae campus, and all commented on not wanting to drive far distances to attend school.

Table 28

Student Quotes for Interview Question 4

Reasons for Choosing Leeward

- I chose Leeward at first for convenience
- I live in Mā‘ili and it is a pretty far drive to Pearl City*
- LCC Wai‘anae is close to where I live. I could attend school without the hassle of driving to town.
- I live in Wai‘anae, I had very little money, I didn’t do well in high school, and I didn’t take the SAT or ACT. On paper, I wasn’t a very good candidate for university admission. LCC gave me a chance to put my past behind me and start fresh.

*In reference to convenience of Leeward CC – Wai‘anae Campus

Tables 29 and 30 relate to choice and recruitment. Responses to question 5 are listed, indicating the reasons for choosing the AAT program and how participants found out about the program and course offerings. Interview question 5 was: Why did you choose the AAT program and how did you hear about it?

Table 29

<i>Reasons for Choosing the AAT Program</i>		
Reasons	Frequency of Response	Percentage of Participants
Always wanted to teach	3	50%
Already attending Leeward	2	33%
Enjoy helping people	1	17%

One participant mentioned a recruiter from INPEACE by name and mentioned her friendly demeanor as a reason for choosing AAT. The student describes the recruiter as follows, “The INPEACE lady came to our Math 111 class and said ‘anybody like sign up for the AAT program?’ and told us all the benefits. From then I was hooked.” The participant noted the financial benefits of involvement with INPEACE/Ka Lama and the AAT program. The student also explained that she is still mentored by the INPEACE representative noting, “She still calls me till this day. I can still get supplies, even for Praxis. If you pass it’s free and they reimburse you”. Three participants noted the

ongoing desire to teach as a reason for choosing AAT, while two mentioned that they had already been attending Leeward and later found out about the program.

Table 30

<i>Reasons for Choosing the AAT Program</i>		
How did you hear about it?	Frequency of Response	Percentage of Participants
Counselor	3	42.8%
Friend/Family	2	28.6%
Online	1	14.3%
INPEACE/Ka Lama	1	14.3%

Question 6 asked students to identify ways in which Leeward and the AAT program prepared them for transfer to a 4-year institution. Question 7 examined ways in which they could have better prepared students. While most participants (67%) reported that they did not feel Leeward and the AAT could do anything more to prepare them, 33% identified the need for more involvement and time in classrooms as a way to improve students' sense of preparedness to transfer to a 4-year institution. One participant said, "At Leeward we're not asked to get involved but just to observe. Being forced to work and interact with the kids instead of just watching would've been nice". Another participant indicated the need for improvement in placements for service learning. In reference to the AAT service learning policy of having students find their own placements for service learning, the participant said, "I felt like I was butting in, some schools never even emailed me back". He also stated "I think it would be more

professional if LCC does it for you (contact/placement) instead of just you going there and show up”.

While the suggestions for improvement were minimal, participants’ reasons for feeling prepared to transfer were many. They are highlighted in table 31.

Table 31

Ways Leeward/AAT Prepared Students for Transfer to 4-Year Institutions

Reasons	Frequency of Response	Percentage of Participants
Lesson Planning	3	23%
Field Experience	3	23%
Running Records	2	15.3%
Teaching Portfolio	2	15.3%
Knowledge of Content Standards	1	7.7%
Class Management	1	7.7%
Advising	1	7.7%

Generally most students (83%) felt prepared to transfer to a 4-year institution. They noted experience in lesson planning, knowledge of content standards and experience in classrooms as reasons for feeling prepared. Notice that field experience is listed as both a factor in feeling prepared and a factor that needs improvement. More discussion on this topic will follow in the next chapter.

Question 8 asks students to identify how their experiences at Leeward have affected their persistence in achieving educational and career goals. Table 32 illustrates

participants' collective responses. Table 32 features select student quotes in response to the question.

Table 32

Experiences at Leeward/AAT that Affected Student Persistence

Reasons	Frequency of Response	Percentage of Participants
Instructors	2	20%
Counselor	2	20%
Sense of Belonging	2	20%
Leeward CC Wai'anae	2	20%
Peers	1	10%
Field Experience	1	10%

Involvement in field experience was noted as a reason for persistence. The student said, "I was reminded why I wanted to become a teacher in the first place". Another student, who identified Leeward CC Wai'anae campus as a reason for persistence, described, "Everyone is family over there and they comfort you". Participants mentioned faculty and counselors as reasons for persistence as well as a feeling of belonging and closeness. It is worth stating that while only 2 participants mentioned LCC Wai'anae as a factor for persistence, most students referred to either Wai'anae or the west coast at some point in their interviews in relation to persistence. Selected responses are listed in the following table.

Table 33

Student Quotes for Interview Question 4

Affect on Student Persistence

- Growing up as a Hawaiian on the Wai'anae coast, there are challenges and the stigma we face as graduates of Nānākuli and Wai'anae High. I feel a sense of responsibility in helping them (future students) overcome those challenges.
- LCC Wai'anae – I just went there to print, it's a nice place to study instead of going to Kapolei library, and they open till 9 (pm). Sometimes it's too loud at my house and I gotta go somewhere quiet.
- We need more Native Hawaiians teaching the youth...and more guys to be a father figure. That's my goal.
- Having AAT instructors come all the out to Wai'anae for us...made us feel...gave us the opportunity to become something
- I had my first baby at 19. It was stigmatizing. I have a part time job, I'm a full time mom, full time student. But eh, you gotta do what you gotta do.

The students' responses indicate an innate desire to teach, and provide various reasons for persistence. Two participants mention being Hawaiian as a reason to persist, and identify themselves as role models. Two students also mention the accessibility of LCC Wai'anae campus as a support and reason for persistence. Both of those students have graduated from Leeward and are attending a 4-year teacher preparation program, but still feel a connection to the Wai'anae campus. This was a repeating theme throughout the data analysis of survey responses, and a more in-depth examination of Leeward CC Wai'anae campus will be revealed in Table 42.

The last two interview questions ask students specifically about barriers and factors of support during their AAT experience. These barriers and supports were organized as 1) Institutional; 2) Instructional; and 3) Personal. The following tables 34 – 36 show institutional, instructional and personal barriers. Table 37 contains select quotes regarding barriers that influence students’ educational and career goal attainment.

Table 34

Influential Factors/Barriers to Educational and Career Goal Attainment

Barriers	Frequency of Response	Percentage of Total Responses
Institutional barriers	8	36.3%
Service Learning Procedures	3	13.6%
Remedial Courses	3	13.6%
Transition/Transferring to 4-Year Institution	2	9.1%

As mentioned earlier in this chapter, all six participants self identified as under-prepared and reported that they needed to take at least one remedial math or English class. Table 34 shows that half of them consider taking the developmental math and English classes as a major barrier. One participant said, “I was ashamed, I was at the lowest English (level). I didn’t even know what a compass test was”. Another shared the same view stating, “To me, ho man, a good year and a half more just to do remedial classes. I would say I had to repeat math classes too, I wasn’t too good”.

Similar feelings of despair and hopelessness echoed throughout other interview sessions as well. The next table demonstrates instructional barriers including teachers who seemed unwilling to help. One participant noted, “When you ask her questions she makes you feel stupid. I hadn’t done math in years. But she made you feel like you should already know this material”.

Table 35

Influential Factors/Barriers to Educational and Career Goal Attainment

Barriers	Frequency of Response	Percentage of Total Responses
Instructional barriers	7	31.8%
Not knowing some of the current DOE practices (SLOs, Curriculum Mapping)	3	13.6%
Some teachers were not helpful	2	9.1%
Math Requirements	1	4.5%
Online coursework	1	4.5%

Two participants identified non-AAT instructional faculty as a barrier, stating they did not feel comfortable approaching the instructor or the instructor was not helpful. Three of the six participants (who are currently DOE teachers) expressed that they were not prepared for some of the current DOE initiatives and would have liked to learn more in teacher preparation. Topics such as curriculum mapping, Student Learner Outcomes

(SLOs) and teacher evaluation were noted as some areas not covered in preservice teacher education and influential barriers.

Table 36

Influential Factors/Barriers to Educational and Career Goal Attainment

Barriers	Frequency of Response	Percentage of Total Responses
Personal barriers	7	31.8%
Time Management Issues:	3	13.6%
Balancing family, work and school	3	13.6%
Mostly myself (study habits)	1	4.5%

Similar to survey responses, interviewees noted time management and balancing school with work and family as personal barriers. When asked about suggestions for the AAT program to support students who have families and work, one participant vehemently suggested that offering more AAT classes at LCC Wai’anae would be helpful, as well as offering more night classes in general. He explained, “Night classes really helped a lot because I would watch him (son) during the day and when my girlfriend comes home she can watch him at night”. The following table will list student quotes related to question 9: What has been the greatest barriers for you in achieving your educational and career goals at Leeward.

Table 37

Student Quotes for Interview Question 9

Barriers

- The transition process from Leeward to (name of 4 year institution) was very new and the counselors were still new. It was difficult to get in touch with them and so lots of questions went unanswered for long time
- I had a lot of remedial courses to take and it took longer for me to graduate
- It took me 6 years to get my associates. I had my baby first and I started taking only one class per semester, one at a time
- I was confused about what was available in terms of transferring. I just chose (name of 4 year institution) because my friends were going. I could have easily chosen (other 4 year institution) or another school, but didn't have enough information.
- Maybe Leeward can have like verbal contracts with schools – have slots ready for students...maybe have this much slots available for OP students, then AAT can direct student to schools instead of us going blind to any school.
- We need more night classes. LCC Wai'anae they cater to the working moms and dads.

To protect the anonymity of institutions and the participants, specific names of institutions or faculty were omitted throughout the document. The final interview question asked students to identify support factors that influenced their educational and career goal attainment. Tables 38 – 40 show student responses to institutional, instructional and personal supports. Table 41 displays student quotes from question 10: What has been the greatest supports for you in attaining educational and career goals at Leeward?

Table 38

Influential Factors/Support for Educational and Career Goal Attainment

Supports	Frequency of Response	Percentage of Total Responses
Institutional Supports	4	30.7%
Academic Advising/Counseling	2	15.3%
Financial aid/scholarships	1	7.7%
Distance ED/Online classes	1	7.7%

Of the three types of support, participants seem to recognize personal supports as most significant (46%). Institutional supports were advising, financial aid and online classes. One student commented on the system-wide distance education tool Laulima, “teachers and students can keep track of assignments, lessons and resources. It's a powerful tool but only some of my professors used it to the fullest potential”. Another comment about online and distance education noted, “online was helpful so I could work and go to school full time”.

Table 39

Influential Factors/Support for Career and Educational Goal Attainment

Supports	Frequency of Response	Percentage of Total Responses
Instructional Supports	3	23%
AAT Faculty Support	2	15.3%
Study groups	1	7.7%

Participants recognized AAT faculty as a factor of support. One student commented, “I miss the AAT. It was so fun. The work was tough...but it was a family”. Another participant referred to a specific AAT course and faculty member who taught an important lesson planning skill, stating “ learning UBD (Universal Backward Design) in class ahead of time, before transition to (name of 4 year institution), made it a lot easier”.

Table 40

Influential Factors/Support for Career and Educational Goal Attainment

Supports	Frequency of Response	Percentage of Total Responses
Personal Supports	6	46%
Family	4	30.7%
Friends/classmates	2	15.3%

All six participants listed either family or friends as a major factor of support. While they also noted that having a family and maintaining responsibilities of family and work, along with school, could pose a challenge, four out of six reported family as an important support factor. Table 41 lists select quotes with regard to factors of support.

Table 41

Student Quotes for Interview Question 10

Supports

- There are many ways AAT has helped me, the teaching portfolio was required before graduation. It helped me to meet the HTSB standards and I used it in my interview for my current position
- (Name of counselor) was the biggest help throughout my time at Leeward. Having a counselor for the duration of my program, always informing me of what I needed to do.
- We had a counselor just for us. She helped me plan and follow through with my career goals, from the first day until graduation and every step in between.
- The professors all came from the teaching profession. All had such different backgrounds, that every concern or question a person could have was addressed by one if not all of them.
- I was fortunate to be eligible for several scholarships. Without that no way I would be able to afford the tuition and would have never returned to school.
- My family understood that I'm going to better my life so they were there to watch my newborn when I had to go to class or study for a test.
- My family...although they crack jokes like 'when you going graduate – been ten years already' I tell them I never giving up. They're very supportive...been there since the beginning.

In addition to the 10 semi-structured interview questions, during the analysis of data from the first interview, several common themes emerged including the LCC Wai'anae campus as a support, the fact that all participants were Hawaiian they each in their own way mention being Hawaiian, and the importance of teaching in their communities. In the follow up interview, I asked participants if they could talk a little

about being a Native Hawaiian student and (future) teacher. I also asked participants to share their thoughts about teaching and where they hope to teach. The following three tables, 42 – 44, reveal student perspectives on LCCW as a support factor, their role as Native Hawaiian teachers and about teaching in their communities.

Table 42

Student Quotes – On Leeward CC Wai’anae Campus as Support Factor

- Best thing was taking classes at Wai’anae. The best thing. I could take my daughter to places and be at school in like 5 minutes.
- People have families. We could always bring our kids to class. They were even involved in the classes.
- The location of the Wai’anae campus was important to me. I live in Mā’ili and it’s a pretty far drive to Pearl City.
- Being in Wai’anae is a big plus.
- LCCW wasn’t intimidating...lots of older students...not trying to compete with all the young kids.
- LCC Wai’anae – I just went there to print, it’s a nice place to study instead of going to Kapolei library, and they open till 9 (pm). Sometimes it’s too loud at my house and I gotta go somewhere quiet.
- Pearl City is so huge, huge campus...fresh young kids from all over the place. LCCW is people from the community, you see familiar faces, and you get the support you need. But having class at Ka Maile Academy – that wasn’t good. * People want some kind of college atmosphere, not one elementary school.
- Driving to school literally took me five minutes. This was convenient.

*Reference to AAT course offered on Ka Maile Academy Charter School campus

Table 43

Student Quotes – On Being a Teacher of Hawaiian Ancestry

- I have a kuleana because there's some kids not as fortunate to have a solid background, no more the support system at home. Teaching them the knowledge they might not get at home is important.
 - I guess not just being a Hawaiian but always living out in the leeward coast, they didn't see me...they didn't see accomplishments out on that side. We are role models.
 - I feel comfortable being Hawaiian at Leeward. Sometimes when you attend college you lose a little of your culture. I didn't feel that. They embraced the culture from the school's address to the clubs and courses offered at LCC. As a teacher I now know the importance of making your students feel comfortable in their learning environment. It affects how successful they will be.
 - Our school is focusing on the worldwide voyage and Hōkūle'a this year. Our goal is to teach the kids we all have to work as one in order to reach our destination. I guess it helps that I'm Hawaiian. But 50% of our student body is military.
-

Several participants mentioned the word “kuleana” or responsibility when talking on this point. Students also identified more with teaching in their communities than they did as being Native Hawaiians and teaching Hawaiian students. The next table describes students' perspectives on teaching in their communities. Several who are already classroom teachers mention how they feel they are impacting children in their community in a positive way.

Table 44

Student Quotes – On Teaching in their Own Communities

- West side – I grew up here. There are certain ways we think and behave. I know the community, where the kids come from. It's important that they know I understand who they are and where they come from.
 - I like my school, I live here I grew up here. My kids see me all over the place, Kmart, Target – they realize I'm not just a teacher; I'm part of the community.
 - An important thing to remember about teaching on the Wai'anae coast, working with parents...Wai'anae people have trouble taking advice from non-natives of Wai'anae, or at least people with different upbringings. This can become a problem when teachers need to get to the root of their student's challenges. Sometimes parents think I grew up somewhere in town, I can tell by the way their faces harden, or they keep their sunglasses on when they talk to me. But something magical happens when I tell them I graduated from Nānākuli High School and that I was raised on the coast. Their sunglasses come off, their arms unfold, and they begin to open up to me. Then I can really discuss how I can help their child. I feel all parents deserve teachers they feel they can approach.
 - I want to teach at Wai'anae elementary, or Makaha. I grew up there. I was the only one on my block that graduated high school. I know they're always hiring on the Leeward coast, but it's where I belong, I grew up in that community.
 - I want my community to be successful. The best way that I feel I can help, without becoming a politician, is to teach the future leaders of my community.
 - I hope to teach in Makakilo, it's my home. I know a lot of familiar faces, my kids play sports, and we see each other in the café during breakfast. I want to impact lives of people in my community. That would be my ideal job.
-

Triangulation of Data

This chapter provided the reader with a detailed view of the case by presenting the research findings in two main sections, namely survey results and interview results. In addition, report and document analysis was used to determine student demographics, articulation agreements, and other program-specific data. Using multiple sources of data in studies provides results that are richer and more substantial than a single data source (Olson, 2011). In this study, the document and report data included in the description of the teacher preparation program shows that Leeward Community College does indeed have a growing role in teacher education. The survey and interview data display specific factors that can be categorized into institutional, instructional, and personal barriers and supports students experienced throughout their education program at Leeward. They address Leeward's role in serving and providing access to underrepresented students, and specifically how they support Native Hawaiian preservice teachers. Together, the triangulation of data from reports, surveys and interviews provide a collective description of the case.

Student demographics.

When comparing the data sources described above, many connections between the data can be found. Furthermore, many questions arise when comparing the data sources, specifically related to student demographics. Document analysis results in Table 2 show increasing enrollment in the AAT Program at Leeward, with the greatest fluctuation in enrollment occurring during the 2007-2008 school year. Between the first and second year of existence, the AAT grew from 24 students to 131, an increase of 82%. Enrollment continued to increase dramatically the following year from 131 students to

246 students enrolled in 2008 – 2009. This represents a 47% increase. A comparison between the initial enrollment of 24 students in 2006, to the current enrollment of 418 students in 2014, indicates an increase in enrollment of 99% within eight years. This shows enormous growth and development in only eight years time and confirms that the AAT program indeed plays a critical role in providing access to students who want to become teachers.

The extensive growth in student enrollment may be attributed to several factors. Document analysis revealed that in the two years following the founding of the program, three new tenure-track faculty members were hired to teach, thus provided more course offerings at varied times and days. The surge in enrollment may also be due to increase in articulation agreements with other 4-year institutions, increased national attention on teacher shortage or extensive publicity connected with standardized test scores.

The demographic profile in Table 2 of students enrolled in the AAT program during the 2012 – 2013 school year shows that the majority of AAT majors were of Native Hawaiian and Filipino backgrounds. This is consistent with document analysis of Leeward Community College student enrollment, which indicates the same two ethnic populations as the highest in the general campus enrollment.

However, Table 8 seems to contradict this statistic and shows that the majority of graduates who participated in the study are of Caucasian and Japanese backgrounds. This shows a discrepancy between ethnic backgrounds of students enrolled versus ethnic background of students who graduate. It is worth noting that the survey population consisted of only 74% of the population and that perhaps those who chose not to respond may have been of Native Hawaiian ancestry. Still, the ethnic demographic of students in

document analysis, surveys and interview data align with the philosophy and literature concerning community colleges and high minority rates. Overall the data supports the fact that Leeward Community College consistently and overwhelmingly serves underrepresented, ethnic minority and academically under-prepared students.

The lack of gender diversity in the AAT program is noted through document analysis in table 3. Female students make up 79% of the enrolled population while only 21% are male. The imbalance is even more pronounced among the survey population of graduates, listed in Table 5. Among graduates who participated in the survey only 4% (7) were male and 86% (44) were female. Among interview participants, the gender disproportion is further established with 64% female and 33% male students. This is confirmed in the literature on teacher preparation that notes the teaching profession to be a predominately female career choice.

Age of the typical AAT student is worth noting as well. Table 3 demonstrates that in the academic year 2012 – 2013, of the 404 students enrolled, 228 (56%) are 18 – 25 years of age. More than 160 students are considered non-traditional with 40% of the total enrollment. However, it is of particular interest here when analyzing Table 5 and the demographics of survey participants (graduates) that reveal 67% (34) are non-traditional students and only 33% traditional students. This is further confirmed in Table 20, which indicates that 83% of the interview participants (graduates) are of non-traditional age while only 17% is considered a traditional student. While Leeward admits students at young ages, the majority of them are not completing on time and therefore by the time of graduation, self-identify as non-traditional. Another possibility is that the

majority of younger students (traditional) are enrolling in the program, but not completing at all.

Reasons for selecting Leeward.

According to the survey results, the top three reasons students chose Leeward Community College were: 1) tuition cost; 2) location of the campus and 3) to transfer to a 4-year university. The survey also noted small class size and course offerings as important factors. Interview results were similar to survey findings and indicated that students choose Leeward for: 1) location of campus; 2) tuition cost and 3) to enroll in the Associate of Arts in Teaching Program. Other factors included a liberal arts degree and admission requirements.

Furthermore, when asked for reasons interview participants chose the AAT program, half of them revealed they had always had a desire to teach and another specified the goal of helping others. Two participants revealed that they were already attending Leeward when they found out about the AAT program and decided to enroll. The fact that both the survey and interview participants defined tuition cost as a primary reason for selecting Leeward aligns with other findings. When analyzing Table 7 results show that 67% of participants receive financial aid. One of the interview participants stated that without the help of financial aid, "I wouldn't be able to afford the tuition and would have never returned to school". A closer examination of Table 7 reveals that 80% of participants work at least part-time, and 70% of students attend Leeward full-time.

Location of the campus is also an important factor in students' choice to attend Leeward CC. Whether referring to the Pearl City campus or the satellite campus in

Wai‘anae, students noted their preference to an institution close to home and opposed to driving far distances to get to school. Table 6 indicates 39 of the 51 respondents noted location as a primary factor in choosing Leeward. Of the six participants in the interview, five of them defined location as a major reason. Other factors such as transferring to a 4-year institution and the AAT program were also high on the list of reasons for selecting the college.

Transferring to 4-year teacher preparation institutions.

Analysis of the survey results indicate that 96% (49) of graduates who participated in the study plan to transfer to a 4-year teacher preparation program and only 4% (2) of students decided not to transfer. Table 9 reveals that 84% (43) of students determined that all of their course work would transfer to the 4-year program and 10% (5) indicated that not all of their course work would be accepted for transfer. In addition, when asked whether students met with the AAT counselor to discuss transfer, 94% (48) indicated yes they did, and 6% (3) did not. Of the 98% who met with an advisor about transferring, only 86% indicated they knew all the requirements for transfer. While the majority of students plan to transfer to a 4-year institution, not all of them knew the requirements and not all of their course work transferred.

Interview results show that all participants felt prepared to transfer. Table 31 defines the top two reasons for feeling prepared as, knowledge of lesson planning and experience working with children. Other factors included knowledge of running records, knowledge of standards, and experience creating a professional portfolio. One student said:

“In (professor’s name) class we learned UBD. We also learned simple teaching strategies and those will help us in our lesson plans. The students here (at the transfer 4-year) never took ED classes before, so I definitely feel like I’m at an advantage. I’m also prepared to get up in front of the class because we had to do that in AAT.”

Throughout the 12 different interviews, participants noted feelings of preparedness. Of those who are currently in the 4-year institution, both expressed feelings of self-confidence and readiness in terms of lesson planning and because of the fact that they had already received two years of teacher preparation. However, some participants mentioned difficulty with the process of transferring and several mentioned difficulties with the transferring institution. For example, one participant commented in reference to the counselor at the transferring institution:

“He was rude, not friendly like (name) and we had to go all the way into town. I thought they were supposed to come to LCC, that’s why I chose that school. He didn’t seem like he would go out of his way to help me or try make the transition smooth. It’s not like you guys. I haven’t even enrolled yet because I’m unsure.”

Criticisms about transfer institutions continued to emerge in the face-to-face follow up interviews as the students may have felt more comfortable sharing their experiences in a relaxed setting. One participant, in reference to the 4-year institution, complained:

“I had to take more classes prior to even getting into the ED program. I should’ve taken my SPED class at LCC, nobody told me...they kept changing requirements,

and it was so frustrating. I didn't know I had to pass Praxis II before teaching. It's really stressful.”

While the above preparations for transfer might relate to instructional supports, criticism and areas for improvement may relate to institutional and instructional barriers and will be discussed later and correlated with results in Tables 34 - 37 that demonstrate students' perspectives on barriers.

Student persistence.

Student persistence may have a direct impact on transfer and graduation rates although that was not the goal of this study. Instead, the focus of this research was to determine barrier and support factors that influenced educational and career goal attainment. Student persistence was viewed in relation to experiences of participants throughout the AAT program at Leeward and ways that AAT affect persistence to continue and complete the program.

Results from the survey in Table 10 show that 100% of participants indicated they felt either “very” or “somewhat” confident or persistent. 75% (38) of students reported feeling very confident and persistent while 25% (14) felt somewhat confident and persistent. This feeling of confidence and persistence may be related to the fact that all participants were recent graduates of the AAT program. It might also relate to their perceptions of their own study habits. Data analysis of the results indicate that 31% (16) students felt they had excellent study habits while 59% (30) reported having “ok” study habits.

Interview results confirm a high sense of confidence and a high level of student persistence. Table 33 lists student quotes regarding persistence, relating to a sense of

community; parenthood; responsibility; and instructional support from faculty. One of the participants commented, “We need more Native Hawaiians teaching the youth...and more guys to be a father figure. That’s my goal”. Another student mentioned the responsibility of having a family is what motivated her to persist, “I had my first baby at 19. It was stigmatizing. I have a part-time job. I’m a full-time mom – full-time student. But eh, you gotta do what you gotta do.”

Teaching in the home community.

One of the themes that emerged through data analysis was the strong sense of responsibility and belonging each interview participant had to their communities and the desire expressed by all to return home to teach. Although this was not part of the research focus, it directly relates to student persistence and educational and career goal attainment. Table 44 highlights select quotes from participants related to this factor. One participant emphasized the importance to her that her students saw her outside of school, within the community, and recognized her not just as a teacher, but also as a local member of the community. Another participant expressed his profound concern for community and unyielding passion for teaching in his hometown. He stated:

“Knowing the challenges that students and parents face and how they can be addressed and overcome...I do feel a sense of responsibility. I know that each child’s upbringing is different, and they experience different challenges, but I know they can overcome them because I overcame my obstacles. I feel that growing up here and teaching here gives me an advantage of having both experience and empathy.”

Barriers to educational and career goal attainment.

Survey results indicate the most significant barrier for students is personal and mostly centers on time management. Specifically balancing family, work and school. 42% of participant responses (19) related directly to time management as a personal barrier. Similarly in the interview data, participants indicated time management as a significant barrier. However, they did not rank time management as high as survey participants. Table 36 demonstrates that 27% of interviewees considered time management a factor. Flexible scheduling, offering online courses, and continuing course offerings at the satellite Leeward CC Wai‘anae campus were interview participants’ responses to ways in which to alleviate some of the time constraints for students. In addition to time, Table 35 noted lack of current DOE practices such as SLOs and curriculum mapping as significant barriers.

Financial barriers such as cost of tuition, lack of financial aid and the need to work while attending school full-time seemed to be significant barriers among both survey and interview participants. Table 17 affirms this for survey participants, noting a lack of scholarships and tuition as barriers. Survey results also indicate that 80% of participants worked at least part-time.

Both survey and interview participants revealed that the need to take remedial classes in math and English were significant barriers, although interviewees rated this higher than did the survey participants. While 9% of survey participants identified with developmental math and English classes as a barrier, 13.6% of interview responses as well as a variety of quotes and anecdotal information confirmed that academically unpreparedness was indeed a challenge. Taking additional courses impacted the time-to-

degree, or time it takes for a student to graduate. Several interview participants commented on the frustration of taking too long to complete coursework and graduate.

Supports to educational and career goal attainment.

Factors of support ranged in degree of importance between interview and survey participants yet both sets of data identify family and friends as personal factors of support. Table 40 demonstrates that interview participants perceived family as the most important support as 30.7% responded. Only 12% of survey participants ranked family as a support.

Academic advising was noted among both survey and interview participants as highly influential support factors. Table 38 shows 15.3% of interviewees noted counseling and advising as a strong support factor. 37% of survey participants ranked academic advising as significant support. Both groups provided detailed narrative information on the effectiveness of the academic advising in the AAT program. One particular name was mentioned countless times during interviews and in open-ended survey responses.

Among instructional supports, the AAT faculty was noted as the highest support factor. Table 39 shows that 23% of interview participants valued AAT faculty as a factor of support. Table 17 verifies that assertion noting 29% of participants who deemed AAT instructional faculty as highly supportive. In interviews and open-ended survey questions, participants demonstrated a fondness for their professors and often noted the appreciation they had for the depth of knowledge and caring attitude they bring to the classroom.

Summary

The final chapter will provide a detailed discussion of the barrier and support factors that influence educational and career goal attainment of AAT students. The data will be organized into specific themes. From these themes, conclusions will be drawn and recommendations made. A specific call to action for Native Hawaiian scholars and those who teach Native Hawaiian students is included. Further topics of research will also be suggested.

Chapter 5: Conclusion and Discussion

Introduction

With the nationwide teacher shortage and rising demand for teacher diversity, community colleges are playing an ever-increasing role in the production of quality teachers. In recent years, they have proven to be an important resource in recruiting future teachers and can be a valuable support in the struggle against teacher shortage and the increasing K-12 student enrollment (Gerdeman, 2001)

As established in earlier chapters, literature on the AAT program and experiences of its graduates at Leeward Community College was non-existent. Adding to the body of literature for AAT programs overall, and for Leeward specifically, the graduates' perceptions and findings from this study might help in improving supports and services for students. This is significant as enrollment in community colleges rise in Hawai'i and throughout the nation.

Results from this case study will be useful to administrators, faculty and staff at Leeward Community College in addressing ways to improve the Associate of Arts in Teaching program to increase the educational and career goal attainment of future teachers. By improving practices and addressing the needs and goals of students, Leeward and the AAT Program will ensure its emerging role in teacher preparation in Hawai'i. Moreover, results from this study may provide information to improve the success rate of Native Hawaiian preservice teachers. This chapter will provide the reader with the following: a summary of major findings including barrier and support factors, implications of the study, recommendations, a call to action, and topics for future research.

Summary of Research Study

The central question that drove the investigation and the goal of this case study defined influential factors that determined community college students' educational and career goal attainment as future teachers. Specifically the research sought to answer the following sub questions:

1. What factors influence the retention and graduation of Native Hawaiian students in the AAT program at Leeward Community College?
2. What is the role of Leeward Community College in providing access to teacher preparation for underrepresented students?
3. What are the barrier and/or support factors for career goal attainment in teaching for AAT graduates?

To determine answers to the questions listed above, data was gathered and analyzed from three sources: 1) historical and current documents and reports; 2) survey of AAT graduates; and 3) interviews with AAT graduates at various stages in their teaching career.

Document analysis gave the reader an overview of the teacher preparation program at Leeward Community College and provided answers to the second sub question regarding the role of Leeward CC in providing access to underrepresented students. Documents such as Leeward CC course catalogues, marketing material used in recruitment, articulation checklists and agreements, and accreditation reports allowed the researcher to provide a detailed description of the AAT Program. Reports from the Office of Institutional Research provided demographic profiles of students enrolled in the program including ethnicity, age and gender.

Survey and interview data were collected to define ways the program can best serve underrepresented students, and thus promote educational and career goal attainment. A close analysis of the data provided answers to the sub questions related to Native Hawaiian student retention and graduation as well as supports and barriers students experience while attending Leeward. Surveys were distributed and collected electronically over the course of seven weeks. A total of 51 respondents contributed to demographic description of graduates in the 2013 – 2014 academic year. Results also provided the study with factors of support and barriers that contributed to their overall educational and career goal attainment. To provide a more detailed description of barriers and supports, two rounds of interviews were conducted with a select group of six participants who either: A) recently graduated from the AAT program; B) graduated from AAT and transferred to a 4-year institution; or C) completed both AAT and 4-year teacher preparation program and are current DOE teachers. All of the participants in the interview process were of Native Hawaiian ancestry, four were female and two male.

Results from both survey and interviews were analyzed and compared to determine barriers and support factors that impacted students educational and career goal attainment. The findings were categorized as follows: 1) institutional barriers and supports; 2) instructional barriers and supports; and 3) personal barriers and supports. Major findings in these categories are discussed in the next section.

Major Findings

Influential factors – barriers.

Survey and interview results indicate the most significant barrier students experienced in achieving their educational and career goals related to personal barriers

and centers around time management. Specifically participants listed difficulty in balancing family, work and school as a primary barrier. The second major personal barrier is finance and money such as tuition, cost of living, and lack of financial aid. Financial aid was also listed as an institutional barrier. Although interview participants did not indicate finance as a barrier in the specific question relating to barriers, they did mention financial restraints during the interview in terms of the need to work full time while attending school, and the difficulties that come with both husband and wife working full time and going to school full time. Table 7 also demonstrates students' financial constraints by highlighting that 80% of survey participants work at least part-time while attending school. While Leeward has little control over students' personal family and financial situations, the findings are helpful for the program in determining the needs of students and finding resources available to support them.

Other institutional barriers included remedial courses and field service procedures. Academically underprepared students are required to take courses in developmental math or English, and depending on the level of preparedness, sometimes they are required to take multiple developmental classes. Both survey and interview participants revealed that the need to take remedial classes was a major barrier and often prolonged graduation. It is interesting that all six of the interview participants, who are graduates of the AAT program, were required to take at least one remedial class. This correlates to the literature which notes that community college students are often academically underprepared, and unlike traditional 4-year university students, they face a higher risk of attrition (Porchea, Allen, Robbins, & Phelps, 2010). Possible ways to address this might involve more collaboration with high school math and language arts

teachers and school curriculum developers. In addition, study groups and peer mentors dedicated solely to supporting students enrolled in developmental courses might provide some remedy to the problem.

Field service was listed as both an institutional and an instructional barrier. Participant criticism about the AAT field service procedures, including holding students responsible for finding their own school placements, revealed that participants were displeased and often unsuccessful in finding school locations. Field placements in teacher education are extremely beneficial in bridging theory and practice. Research on teacher practicum note that field placement and support in this area are crucial, as the need for students' practical knowledge and skills for teaching is vital (Bennett, 2012). Some researchers suggest placements within community-based organizations and that partnering with community groups enhance the preservice teacher experience (McDonald et al., 2013).

Influential factors – supports.

Among all factors of support, students identified personal support, namely family and peers, as the most significant. Interestingly family is identified earlier as a barrier, in terms of managing time and juggling responsibilities. However, participants acknowledged that the support from family was crucial in their attainment of educational and career goals. Many noted in Tables 40 and 41 that parents, spouses and children contributed to their success and resolve to meet their goals. As noted by participants in previous tables in Chapter 4, classes offered at the Leeward satellite campus in Wai'anae as well as other night classes, provide working students with families the opportunity to continue schooling.

The greatest institutional support factor noted by participants was academic advising. The single most repeated resource in the survey was unquestionably the academic advising provided by AAT. Numerous select quotes are listed in tables within the previous chapter that identify this resource as an important and meaningful factor in students' goal attainment. Students also noted AAT faculty as an instructional factor of support and consistently referred to the atmosphere of belonging and genuine concern that AAT instructors provided.

Implications

Findings of this research align with existing literature on the position of community colleges in teacher preparation and teacher diversity. Since community colleges generally admit more underrepresented students than 4-year institutions, the CC systems are increasingly gaining recognition as a viable source for producing diverse quality teachers (Aud et al., 2012). The demographic profile of AAT students, provided by document analysis, supports this notion and demonstrates that AAT students indeed come from underrepresented and diverse populations.

One of the surprising findings, however, related to differences in ethnicity among students who enrolled in the program, versus those who actually completed and graduated. To clarify this significant theme, Table 45 provides a comparative analysis of ethnicity among students who were simply enrolled in the AAT program, and students who completed and graduated within the last academic year. For purposes of clarifying the point made above, only the four largest ethnic populations will be shown.

Table 45

Comparative Analysis of Student Ethnicity by Enrollment vs. Graduation

Ethnicity	Enrolled in AY 2012 - 2013		Graduated in AY 2013 – 2014	
	N	%	N	%
Caucasian	51	13%	23	20.7%
Filipino	82	20%	19	17.1%
Native Hawaiian	126	31%	15	13.5%
Japanese	22	5%	20	18%

While Native Hawaiian and Filipino students make up the two largest populations of students enrolled in the AAT program, Caucasian and Japanese students are the top two groups among graduates (who participated in the study). In fact, Native Hawaiian completers are outnumbered by Caucasian, Japanese and Filipino students and are ranked fourth highest amongst graduates. Implications of this finding merit a closer look at completion rates among underrepresented students in general and Native Hawaiians specifically. Furthermore, resources and supports are needed to support Native Hawaiian students' retention and graduation.

One of the major barriers reported by AAT students was time management. Consistent with research of community college students, those who have poor time management practices, such as cramming for exams or not allotting adequate time for homework assignments, often demonstrate poor academic performance and are at higher

risk for attrition (MacCann, Fogarty, & Roberts, 2012). Although this was identified as a common barrier among college students, it must be addressed as a distinctive concern in the AAT program.

Findings from this research will be used to enhance Leeward's role in teacher education by diminishing barriers, refining supports and creating innovative strategies for recruitment, retention, preparation and transfer to a four-year teacher education program.

Recommendations

Results of this research may provide readers with insight on improving their own practices in teacher education and preparation. In addition, outcomes may be helpful in considering programmatic improvement within the AAT program at Leeward and other programs interested in supporting underrepresented students in becoming teachers. The recommendations that follow may serve as a starting point for further research or action and include suggestions for transfer; articulation; field experience; flexible scheduling; financial aid; time management and recruitment.

- 1) **Ensure consistent advising for transfer.** While 96% of the survey population plan to transfer to a 4 year teacher preparation program, and 83% of interview participants have already transferred to 4 year teacher education institutions, anecdotal information gathered from both survey and interviews reflect that some students are unaware of transfer options and requirements. Moreover, after the student leaves the AAT program and is enrolled in the 4-year institution, standardized tracking or mentoring is non-existent. Follow up should be made to increase success rates. Other programs have noted success in consistent

mentoring of students beyond graduation. Most participants noted academic advising as a major support factor. However many expressed frustration and feelings of defeat when discussing advising support or lack thereof, at the transfer institution. Improvement of advising practices at both community college and 4-year transfer institutions will directly benefits student success and goal attainment.

- 2) **Develop and maintain strong articulation agreements.** Leeward currently has articulation agreements with four in-state university programs. However, some of those articulations, as identified by interview and survey participants, continue to change. Newer programs tend to lack in support services and communication with students. Advisors at both the community college and all transfer institutions should be prepared to help students develop a plan of study so that no loss of coursework occurs when transferring. A friendly and comfortable atmosphere provided at the university, while advising, can help students who might already be feeling angst, settle into the environment and feel at ease. One interview participant noted that she felt like she was “bothering” the counselor at her 4-year institution. She indicated that he was unfriendly and unsupportive. Since advisors are usually the first point of contact with the student, it is imperative that they create a welcoming and relaxed space.
- 3) **Ensure field experience is structured and supported.** The earlier students can participate in K-12 classrooms, the sooner they can determine whether or not they truly want to be teachers. Several participants noted that having to find their own placement in schools was difficult. One participant noted that he felt it would be

more “professional” if the AAT program would contact schools and find placements. Another student expressed frustration in having to call and email six different schools before getting a call back. It is imperative that preservice teachers experience success in the practicum component of teacher education, which may connect to their sense of achievement and persistence in educational and career settings.

- 4) **Provide flexible and varied scheduling.** Administrators should consistently review course scheduling and enrollment patterns to determine changing needs of students. When courses limited and are offered only once a semester or once a year students have restricted opportunity to enroll. Some participants noted frustration at the transfer institution, revealing that particular education courses were only offered every-other semester. Another participant expressed frustration with the limited AAT course offerings at Leeward CC Wai‘anae campus. Limiting course offerings can lead to classes filling up too quickly leaving students unable to enroll. Courses might also be offered at inconvenient times for students who have families or work during the day. This may result in students giving up altogether. Underrepresented students in community college and first-generation college students are at greater risk for attrition since they are already unsure of their ability to attain educational and career goals (MacCann et al., 2012). To promote success for all students, classes should be offered at varied times and days, at various locations and through distance education. Many participants noted the benefit of attending classes at the satellite campus in Wai‘anae.

- 5) **Offer scholarship workshops and provide financial aid awareness.** For many students, financial aid and scholarships are imperative to their enrollment and retention in higher education. Without it, many of them would drop out of school and never attain educational and career goals. Financial aid offices and education programs should conduct research on local scholarships available specifically for future teachers. Many options are available on local, state and federal levels for students majoring in education. In addition, in Hawai‘i, exclusive scholarships are available for Native Hawaiian students, as well as students from specific high schools and communities.
- 6) **Provide time management workshops and strategies throughout the year.** One of the major barriers students experience is time management. They note the difficulties of managing the demands of school with work and family, and often struggle to meet deadlines and study for tests. Time management workshops should be provided to foster an ongoing college skill that is reinforced through various ways. Assigning a peer mentor or faculty member to students can help keep them on track. These mentors or faculty members can encourage students to practice time management skills. They can establish a working relationship with the students and check in on them periodically. Building time management skills into the curriculum is another way institutions can diminish this barrier.
- 7) **Research and establish measures of recruiting retaining, and graduating underrepresented students.** Results of this study demonstrated that although Native Hawaiian students were the largest ethnic population enrolled in the AAT program, they ranked fourth in size among the graduating population. While it is

evident that Native Hawaiian students are enrolling in the program at high rate, it is equally apparent that they are not graduating at the same proportion. Research into the correlations between recruitment, retention and graduation can support all programs to understand factors in increasing graduation rates and student success. Specific research on student success among Native Hawaiians will help reduce the current incongruity.

In a Perfect World: A Call to Action

How we serve our indigenous people and provide access to higher education is a call to action for all educators and particularly crucial for Native Hawaiian scholars and researchers. The recommendations above highlight specific ways in which the Associate of Arts in Teaching program at Leeward, and institutions in general, can support underrepresented students in career and educational goal attainment. In a perfect world, community college students would complete their AA degree within two years and be ready for transfer to a four-year institution the following semester. The results of this study demonstrate that 2-year completion of the AAT degree is rare and often foiled by numerous difficulties and barriers including time management and finance. Additional obstacles that prevent student persistence were revealed in the study. The following suggestions go beyond the recommendations listed in the previous section and highlight ways to support students in a perfect world, and optimistic changes the researcher envisions for teacher education at Leeward Community College in general and for its Native Hawaiian future teachers specifically.

1) **Support and facilitate the completion of the AA degree within two years.** As a result of this study, many themes emerged and provided implications for improvement of the current AAT program to include varied supports for future teachers. Namely the expediting of time-to-graduation was an important factor. The longer it takes for a student to graduate, the higher the likelihood of attrition. One of the major factors of delay in graduation was remedial coursework. All interview participants indicated developmental education classes as a major barrier. This was echoed by survey results as well. Networking with local high schools and partnering with curriculum coaches in math and language arts will provide a strong foundation in these content areas. This partnership will foster the transition between high school and post-secondary learning.

Creating a pipeline between high schools and Leeward faculty of math and language arts will reduce the need for remedial courses by providing access to and preparation for placement compass tests. Additionally, the AAT program faculty should work hand-in-hand with current math and language arts faculty on the college campus to promote programmatic change. Finally, providing free test preparation in math and language arts for non-traditional students through online and community supports, will allow access to students who have been disconnected from the educational environment and might need practice in these specific content areas. Preparing both high-school graduates and non-traditional students in math and language arts will greatly improve their time-to-graduation and increase persistence rates.

2) **Provide access by increasing AAT presence at the Leeward CC Wai'anae campus and welcome the 'ohana as part of the educational environment.**

Both survey and interview results noted that a large majority of AAT students are working parents. For years, the AAT program offered the unchanged two courses per semester at the LCCW campus. Several study participants noted this as a barrier. The limited quantity and variation of course offerings in a face-to-face environment within the Wai'anae community poses a concern. While online distance education courses are offered to students on the Wai'anae coast, in-person courses that offer personal and relational connections are culturally congruent and imperative in the success of Native Hawaiian students.

An overwhelming number of research participants noted the LCC Wai'anae campus as a factor of support, though the response to this need has potentially been overlooked. Analysis of the most recent course catalogues reflected that there were no face-to-face courses offered at the satellite campus in the fall 2014 or during the spring 2015 semesters. Thus, its limited offering of the same two AAT courses has been further reduced from two in-person courses per semester, to none at all. It is critical for the AAT program to reestablish a presence on the Wai'anae campus and answer to the needs of its most vulnerable students.

Moreover, in a response to the working parent population, childcare services offered during night classes will greatly improve enrollment and attendance for LCCW students. By welcoming the family into the institutional environment, Leeward Community College will not only support its current

students, but also create a culture of learning and cultivate a vision of post-secondary education beginning with children of its students. This service must be provided free-of-charge or at a very minimal rate, as finance was also indicated as a major barrier. An added addition would include involvement of current AAT students in the planning and facilitation of such assistance and service. Under the supervision and guide of the AAT program faculty, future teachers would realize highly valued field experience by working in the childcare facility.

Simultaneously, students who are working parents and attending classes would be provided with much-needed childcare support during their scheduled class time.

This culturally and community-centered approach supports all stakeholders, embraces ‘ohana as part of the institution and promotes graduation and retention rates.

- 3) **Provide specific and culturally appropriate support for Native Hawaiian future teachers by reaffirming cultural and familial identities.** As outlined in the system’s mission statement, Leeward Community College and the University of Hawai‘i system recognizes a deliberate emphasis on the support of Native Hawaiian educational attainment by explicitly stating in the mission, “As the only provider of public education in Hawai‘i, the University embraces its unique responsibilities to the indigenous people of Hawai‘i” (Cabral, 2012). The institutional mission begs the question, “what does this look like in teacher education?” and requires teacher educators to ask themselves how to address the unique needs of the indigenous population of future teachers.

One of the ways to address persistence of Native Hawaiian students is to

increase their sense of identity and conviction in their ancestral rights, native intelligence and familial connections. For too many decades, Hawaiians have been conditioned to see themselves as inferior and substandard. Generations of western occupation have colonized the native mind and perhaps tainted the academic outlook of Native Hawaiian students. Vulnerability of students on the Wai‘anae coast in terms of low socio-economic status, high rates of high school dropout and lower matriculation rates to university systems mirror this position. The undeniable incongruity of enrollment vs. graduation rate among Native Hawaiian students add to and sheds light on this apparent perspective. Research findings demonstrate a strong sense of desire to achieve educational and career goals and sense of kuleana (responsibility) to return to the home community as teachers.

As noted in the literature review, underrepresented students do best when they perceive a connection to culture, community and family (Tierney, 1999). Cultural competence and knowledge among its faculty is imperative in supporting the indigenous population of students. It is not merely enough for faculty of indigenous students to be “aware” of the cultural backgrounds of students. It is undoubtedly imperative for educators to make a sustained effort to ascribe to a deeper level of understanding and connection to its Native Hawaiian students.

Supports for faculty include cultural seminars and professional development, which would allow for cultural capacity among its educators and connection to its program participants beyond a superficial level. Involvement of faculty in community efforts in the areas surrounding the institutional

environment and including students will add to the deeper level of connection.

More often than not, teachers who teach in minority and low-income schools do not live in nor interact with the communities. Demonstrating a commitment to the neighboring communities and indigenous population through involvement in non-academic events diminishes this supposed barrier.

- 4) **Bring pilina (relationships) to the forefront and model through teaching practice.** For many years, the HIDOE touted the 3R's as best practice: 1) rigor; 2) relevance and 3) relationships. Indisputably for the indigenous student, the greatest of these is relationships. Often native students feel a sense of disconnect with educational systems from which they have been disenfranchised (Oakes & Maday, 2009). By positioning pilina, or relationships, at the forefront of education, rather than peddle it as mere widow-dressing, will increase the sense of belongingness among its Native Hawaiian preservice teachers. This will consequently increase student persistence and graduation rates. The emphasis of relationships as an essential and conspicuous component of the education environment, through modeling behaviors and including it in the curriculum, would benefit all students.

Topics for Future Research

While this study has clarified important themes relating to educational and career goal attainment, it has also pointed out the need for further studies in related areas. There are numerous future studies that could be valuable. For instance, whereas this research focused on goal attainment of community college students, further studies on retention

and goal attainment at 4-year universities or other AAT programs in Hawai‘i and nationally, would be beneficial. It was evident that rates of enrollment and rates of graduation among participants were discrepant. It would be interesting to study the reasons for attrition and reasons for persistence. Specifically in Hawai‘i, researchers could contribute to the breadth of literature by studying attrition and persistence of Native Hawaiian and other ethnic minority students. Results could assist current programs locally and pertain to a wider audience nationally.

Finally, it would be highly beneficial to conduct a follow up study of the participants in this research to find out their persistence in attaining educational and career goals. This would yield fascinating comparative results and could inform both the AAT program at Leeward CC and community college teacher preparation programs in general, about reasons for persistence or attrition as well as impact of barriers and supports in goal attainment.

Conclusion

The purpose of this research was to determine barrier and support factors that contributed to the educational and career goal attainment of students. Specifically the study aimed to uncover the role of Leeward in teacher preparation and serving underrepresented groups, as well as persistence and retention of Native Hawaiian preservice teachers. Document analysis revealed the steady increase in enrollment of the AAT program and Leeward’s integral role in teacher preparation in Hawai‘i. Survey data provided an overview of AAT students and graduates and indicated barrier and supports that influenced educational and career goal attainment.

The interview data uncovered six success stories of Native Hawaiian preservice and in-service teachers. All interviewees completed the AAT program despite great adversity. All interview participants, along with a vast majority of survey respondents, were required to take multiple courses in developmental math and English before enrolling in education courses. Several expressed frustration in the length of time taken to complete a two-year AAT degree. Some had families at a young age while others worked full time and attended school full time. All of the interview participants persisted. Currently, three of the six interviewees are HODOE classroom teachers and teach in their communities. For different reasons, these Native Hawaiian students persisted and completed the AAT degree and continued on their teacher education pathway. Despite limitations of remedial coursework; demands of family, school and work; and extended time to graduation, they persevere and serve as leaders and role models in their home communities. Their stories and experiences significantly inform the AAT education program at Leeward, and contribute as critical examples for other teacher education programs in the state of Hawai'i and beyond.

Appendix A: Interview Protocol – Contacting Participants

Protocol Note: After purposeful selection of interview participants, determine selected students' availability on campus or locations off campus. Students who are not accessible for personal contact on campus will be telephoned or contacted via email.

Researcher Protocol:

Hello I am Kale'a Silva, Instructor at Leeward Community College's Associate of Arts in Teaching program. I am currently conducting research to determine the factors, both barriers and support factors that influence the educational and career goal attainment of students in the AAT program at Leeward Community College. As part of the research process, I will be conducting personal interviews with students who are ready to graduate or have already graduated from the AAT program at Leeward. I believe students' personal experiences in the program can provide valuable insight for my research. The goal of this research study is to develop improvement processes for our education program based upon students' personal perceptions and experiences.

Your name, (*Student's Name*) has been purposefully selected as an interview participant in the study, if you agree to do so. The interview will take approximately 45 – 60 minutes of your time, and we can arrange a date, time and location most convenient for you. Will you agree to participate in an interview? (*Await participant response. If he/she agrees, proceed with the following protocol. If participant does not agree, thank him/her for his/her time and say goodbye.*)

Thank you for agreeing to participate in the interview. I would like to conduct your interview between these dates (list dates here) at either Leeward Community College or at a location more convenient for you. (*Provide a list of dates and times for participant to choose from. If participant cannot make any dates and times listed, ask for input for open dates and times. If conducting the interview on the LCC campus is not convenient for participant, ask for possible location options.*)

Confirm date, time and location, and ask if the participant would like a reminder phone call or email. Continue with the protocol below to conclude the conversation.

I appreciate the time you have set aside for a personal interview. Prior to the interview, you will be asked to sign a consent form for release of the interview information to be used for research purposes as described above. I look forward to seeing you on (*list date, time and location*). Here is my contact information in case you need to contact me prior to the interview date (Either provide participant with my business card if approached in person, or provide my contact information via phone/email). I'll see you soon.

Appendix B: Interview Process Guide

Interview Process Guide

1. Purposefully select current and former AAT students based upon preset criteria, from fall 2013 and spring 2014 enrollment rosters and graduates on file, to contact for a personal interview.
2. After acquiring course enrollment information for selected students, begin contacting them in person or via phone/email to request an interview.
 - a. When approaching students, be sure to include my name, the name of the institution, the purpose of the research, and the importance of their participation (Follow Interview Protocol – Contacting Participants)
3. After participant agrees to an interview, immediately set up a time, date and location for the interview. Also inform each participant that a consent form will need to be signed before the interview and that a copy will be provided for them.
4. When each participant arrives for the interview, give the consent form to sign.
5. Before proceeding with the interview, follow the guidelines for interviews proposed by Frey and Oishi (1995).
 - a. Use participants full name
 - b. Identify myself and the institution
 - c. Explain the research purpose
 - d. State or re-state the important interview conditions such as confidentiality, approximate length, and the necessity of tape-recording the interview.
 - e. Describe the benefits to participation.
 - f. Ask for permission to proceed with the interview.
6. Be sure the participant is comfortable, ask if they have any questions regarding the interview or the interview process, and then begin the interview.
7. During the interview, do not continuously write respondents' answers, but rather, listen intently and take only minimal notes.
8. After the interview, thank the participant for his/her time and ask if he/she has any questions.

Appendix C: Interview Questions

Interview Questions

Protocol Note: Before beginning interview, introduce myself as the researcher, give a background of the research study and ask the interview if he/she has any questions before beginning the interview.

Interview Note: Use prompts when necessary to encourage participants to elaborate on responses.

1. What are your personal goals, your educational goals, and your future career goals?
2. Do you have any role models? In other words what influenced your career choice to become a teacher?
3. What are the attitudes of your family and peers regarding college? Are they involved in your schooling?
4. Why did you choose Leeward Community College as your educational institution?
5. Why did you choose the AAT program and how did you hear about it?
6. In what ways has Leeward made you feel prepared to transfer to a teacher preparation program at a 4-year institution?
7. In what ways could Leeward have made you feel more prepared to transfer to a four-year teacher preparation program?
8. How have your experiences at Leeward affected your persistence in achieving your educational and career goals? (Interview note: define the term persistence as “refusing to give up”)
9. What have been (are) the greatest barriers for you in achieving your educational and career goals at Leeward? (Note: Use prompts if necessary, to determine student’s personal, instructional, or institutional factors without leading the participant’s ideas/responses).

10. What has been (are) the greatest support(s) for you in attaining educational and career goals at Leeward? (Note: Use prompts if necessary, to determine student's personal, instructional, or institutional factors without leading the participant's ideas/responses).

*Note: after coding data from first round of interviews, and finding emerging themes, additional questions were asked in the second round of interviews. These additional questions are referred to in Chapter 4 Findings.

Appendix D: Interview Question Crosswalk

	Theoretical Framework			
	Bronfenbrenner's Ecological Systems Theory on Human Development			
Semi-structured Interview Questions:	Microsystem Immediate Environment – family, peers, neighbors, school	Mesosystem Connections between students' immediate environment – ex: bridge between home and school	Exosystem External environment and social systems – Ex: parents or children's workplace, economy, government	Macrosystem All subsystems and general beliefs, values and culture of society that regulate one's behaviors
1. What are your personal goals, your educational goals and your future career goals?	X	X	X	X
2. Do you have any role models? In other words, what influenced your career choice to attend college and become a teacher?	X	X	X	X
3. What are the attitudes of your family and peers regarding college? Are they involved in your schooling?		X		
4. Why did you choose Leeward Community College as your educational institution?		X	X	
5. Why did you choose the AAT program and how did you hear about it?		X	X	
6. In what ways has Leeward Community College made you feel prepared to transfer to a 4-year teacher preparation program?		X	X	

7. In what ways could Leeward have made you feel more prepared to transfer to a four-year program?		X	X	
8. How have your experiences at Leeward affected your persistence in achieving your educational and career goals?	X	X	X	X
9. What have been (are) the greatest barriers for you in achieving your educational and career goals at Leeward?	X	X	X	X
10. What has been (are) the greatest support(s) for you in attaining educational and career goals at Leeward?	X	X	X	X

Appendix E: Sample of Survey Consent Form

University of Hawai'i
Consent to Participate in Research
**Impact of the Associate of Arts in Teaching Program
On Participants' Educational Attainment:
A Multiple Case Study**

My name is Jaydene Kale'a Silva, and I am a graduate student at the University of Hawaii (UH). A requirement of my doctoral program is to conduct a research project. The purpose of my project is to examine the Impact of a community college teacher preparation program on future teachers' educational attainment. I am asking you to participate in this project because you are at least 18 years old and enrolled as a student at Leeward Community College in the Associate of Arts and Teaching program. Participation in this study will involve the completion of an anonymous survey. I am asking you to participate in this project because you are at least 18 years old and currently enrolled or have been enrolled as a student at Leeward Community College in the Associate of Arts and Teaching program.

Project Description – Activities and Time Commitment: Participants will fill out an electronic survey. Survey questions are primarily multiple choice using a Likert scale. Completion of the survey will take approximately 10 minutes. Around 50 - 60 people will take part in this project.

Benefits and Risks: There will be no direct benefit to you for participating in this survey. The results of this project may contribute to a better understanding of the practices and supports of pre-service teachers with regard to supports and barriers in relation to educational attainment. There is little risk to you in participating in this project.

Confidentiality and Privacy: This survey is anonymous. I will not ask you to provide any personal information that could be used to identify you.

Voluntary Participation: Participation in this project is voluntary. You can freely choose to participate or to not participate in this survey, and there will be no penalty or loss of benefits for either decision. If you agree to participate, you can stop at any time without any penalty or loss of benefits to which you are otherwise entitled.

Questions: If you have any questions about this study, you can contact me at [(808) 455-0397 & via email at Jaydene@hawaii.edu]. You can also contact my faculty advisory, Dr. Ku'ulei Serna, at [808-956-4412 & via email at kserna@hawaii.edu]. If you have any questions about your rights as a research participant, you can contact the UH Committee on Human Studies at 808.956.5007 or.

Please print a copy of this page for your reference.

[CLICKING HERE](#) will take you to the first page of the survey and will therefore imply your consent.

Appendix F: Online Survey
Web Survey for Education Students at Leeward Community College

Please respond to the questions below. Responses should coincide with your time of enrollment at Leeward CC. If you have already graduated, please respond with regard to your enrollment as an Leeward Community College student.

1. What is your declared major at Leeward Community College?

_____ Associate of Arts in Teaching (AAT)

_____ Alternative Certification for CTE Teachers

2. In how many credit hours are you enrolled this semester?

_____ Credit hours

3. How long have you been attending Leeward including this semester? (Please answer in total number of semesters)

_____ Semesters

4. Has your enrollment at Leeward Community College been continuous or periodic?

_____ Continuous enrollment _____ Periodic enrollment

5. Do you live in the Leeward District?

_____ Yes

_____ No

6. In which city do you live?

7. Do you receive financial aid?

_____ Yes

_____ No

8. Are you the first person in your immediate family to attend college?

_____ Yes

_____ No

9. During your first semester of enrollment at Leeward were you at the English 100 level?

_____ Yes

_____ No

10. During your first semester of enrollment at Leeward were you at the Math 100 level?

_____ Yes

_____ No

11. Why did you choose Leeward as your educational institution? (Check all that apply)

- Tuition cost Small class size to transfer to a 4-year institution
- Close to home Course offerings To complete a certification
- Scholarship To complete an AA degree To obtain job-related skills
- for self-improvement To change careers To obtain specific content knowledge
- Other: _____

12. When did you or do you plan to graduate from Leeward Community College?

Fall 2013 Spring 2014 Other

13. Do you plan to transfer to a teacher education program at a four-year institution?

Yes No

14. If you answered yes to the above question, do you know what is required for transfer to a teacher preparation program at a four-year institution (such as course requirements or entrance requirements into the four-year teacher preparation program)?

Yes No

15. If you plan to transfer to a 4-year teacher preparation program, what college/university do you plan to attend?

Chaminade University University of Pheonix

University of Hawai'i - Mānoa Undecided

University of Hawai'i - West O'ahu Other: _____

16. Have you met with a Leeward CC academic advisor for guidance regarding degree requirements or for guidance on transfer requirements into a teacher preparation program?

Yes No Not applicable

17. If you plan to transfer to a teacher education program at a four-year institution, will all of your coursework at Leeward transfer to that institution?

Yes No Don't know

18. If you answered no to the above question, how many credits will not transfer?

Semester hours

19. Please check one of the following statements that best describes your study habits:

I have excellent study habits. My study habits are OK.

I have poor study habits.

20. Please check one of the following phrases that best describes your level of confidence or persistence in achieving your educational goals at Leeward.

Very confident/persistent Somewhat confident/persistent

Not at all confident/persistent

21. Please rate the quality of instruction you have received in your education course(s) at Leeward.

Excellent Quality Average Quality Poor Quality

22. Please rate the relevance of your education courses to your future plans in teaching.

Very relevant Somewhat relevant Not at all relevant

23. Please rate the quality of your K-12 observation, service learning and/or field experiences in your education course(s) at Leeward.

Excellent Quality Average Quality Poor Quality

24. Please rate the quality of instruction you have received in your general education course(s) at Leeward.

Excellent Quality Average Quality Poor Quality

25. Please rate the helpfulness of the faculty to you in achieving your educational goals at Leeward.

Very helpful Somewhat helpful Not helpful

26. Please rate the helpfulness of the advisors or counselors to you in achieving your educational goals at Leeward.

Very helpful Somewhat helpful Not helpful

27. Please rate the helpfulness of the staff and administrators to you in achieving your educational goals at Leeward.

Very helpful Somewhat helpful Not helpful

28. Please rate the overall quality of your educational experience at Leeward.

Excellent Quality Average Quality Poor Quality

29. Do you feel your Leeward experience will prepare you to make a successful transition to a four-year institution?

Yes No Not applicable

30. What resources do you or have you used at Leeward to support your education program? (Please check all that apply)

Library Math Lab Writing Center

LRC Tutor Peer Mentor Computer Labs

Financial Aid Services Academic Advising Counseling Services

Ki Office/Special Needs Job Prep Services Learning Commons

Hālau 'ike o Pu'uloa Student Life Ho'oulu

Other: _____

31. Please list any additional resources you think would support your education program at Leeward.

32. Do you feel that Leeward offers classes during times and days that work well for your schedule?

Yes No

33. What is your current Grade Point Average at Leeward?

Between 3.5 - 4.0

Between 3.0 - 3.5

Between 2.5 - 3.0

Between 2.0 - 2.5

Between 1.5 - 2.0

Lower than 1.5

34. What is your year of birth? 19_____

35. Are you male or female?

Male Female

36. What is your marital status?

Married Single Divorced Widowed

37. Do you have children?

Yes No

38. If yes, how many children do you have?

_____ Children

39. If you are employed how many hours per week do you work?

0-10 hours 11 -20 hours 21-39 hours 40 hours or more

Not applicable

40. Are you of Native Hawaiian ancestry?

Yes No

41. If you are Native Hawaiian, what is your sense of responsibility to the Native Hawaiian Community? How might your choice of becoming a teacher contribute to this responsibility?

42. What is your ethnic background? Please check all that apply

Native Hawaiian Filipino Japanese Caucasian

Chinese Native American Samoan Marshallese

Other Pacific Islander Other Asian Other

43. Of all factors listed on this survey or other factors not included what is (are) the greatest barrier(s) you have encountered at Leeward in an effort to achieve your educational goals? (Use the back of this paper if additional space is needed).

44. Of all the factors listed on this survey or other factors not included, what is (are) the greatest support(s) or aid(s) you have encountered at Leeward in an effort to achieve your educational and career goals? (Use the back of this page if additional space is needed.)

Appendix G: Sample of Interview Consent Form

University of Hawai'i
Consent to Participate in Research

Impact of the Associate of Arts in Teaching Program On Participants' Educational and Career Goal Attainment: A Case Study

My name is Jaydene Kale'a Silva, and I am a graduate student at the University of Hawaii (UH). A requirement of my doctoral program is to conduct a research project. The purpose of my project is to examine the Impact of a community college teacher preparation program on future teachers' educational attainment. I am asking you to participate in this project because you are at least 18 years old and currently enrolled as a student or have been enrolled at Leeward Community College in the Associate of Arts in Teaching program. Participation in this project will involve the interview process.

Project Description - Activities and Time Commitment: If you participate, I will interview you once, either in person or via phone. The interview will last for about 25 to 30 minutes. I will record the interview using a speakerphone and/or a digital audio-recorder. I am recording the interview so I can later type a transcript – a written record of what we talked about during the interview - and analyze the information from the interview. If you participate, you will be one of a total of 7 – 10 participants who I will interview individually.

Benefits and Risks: I believe there are no direct benefits to you in participating in my research project. However, the results of this project might help me and other researchers learn more about the supports and barriers in place within the teacher preparation program of this study. I believe there is little or no risk to you in participating in this project. If, however, you are uncomfortable or stressed by answering any of the interview questions, we will skip the question, or take a break, or stop the interview, or withdraw from the project altogether.

Confidentiality and Privacy: During this research project, I will keep all data from the interviews in a secure location. Only my research advisor and I will have access to the data, although legally authorized agencies, including the University of Hawai'i Human Studies Program, have the right to review research records.

After I transcribe the interviews, I will erase the audio-recordings. When I report the results of my research project, and in my typed transcripts, I will not use your name or any other personally identifying information. Instead, I will use a pseudonym (fake name) for your name. If you would like a summary of the findings from my final report, please contact me at the number listed near the end of this consent form.

Voluntary Participation: Participation in this research project is voluntary. You can choose freely to participate or not to participate. In addition, at any point during this project, you can withdraw your permission without any penalty of loss of benefits.

Questions: If you have any questions about this project, please contact me at via phone (808) 455-0397 or e-mail (jaydene@hawaii.edu). You can also contact my faculty advisory, Dr. Ku'ulei Serna, at [808-956-4412 & via email at kserna@hawaii.edu]. If you have any questions about your rights as a research participant, in this project, you can contact the University of Hawai'i, Human Studies Program, by phone at (808) 956-5007 or by e-mail at .

You will be given a copy of this consent form for your records.

If you agree to participate in this project, please sign the following signature portion of this consent form below.

Signature(s) for Consent:

I agree to participate in the research project entitled *Impact of the Associate of Arts in Teaching Program On Participants' Educational Attainment: A Case Study*, I understand that I can change my mind about participating in this project, at any time, by notifying the researcher.

I agree to be audio recorded: Yes_____ No _____

I agree to have the information from the interview(s) reported: Yes_____ No _____

Your Name (Print): _____

Your Signature: _____

Date: _____

Appendix H: Sample of Administrator Consent Form to Conduct Research

To: Manuel Cabral
Chancellor, Leeward Community College

From: Jaydene Kale'a Silva
Instructor, Associate of Arts in Teaching Program

I am currently engaged in research as part of my doctoral program at University of Hawai'i Mānoa in the College of Education, Curriculum Studies Department. The research seeks to determine factors that influence the educational and career goal attainment of future teachers at Leeward Community College. As part of the research process, I will be collecting data from our Office of Institutional Research, from past and current Leeward documents or reports through the Banner system, as well as survey and interview data from current and former AAT students at Leeward.

Student participation in this research will be voluntary. If students decide not to fill out the survey or engage in an interview, it will not affect their academic standing in any way. At no time will any indentifying material be used in such a way as to indentify students personally. At no time will any specific information be used without students' express written consent.

If you have any questions about this project, please contact me at via phone (808) 455-0397 or e-mail (jaydene@hawaii.edu). You can also contact my faculty advisory, Dr. Ku'ulei Serna, at [808-956-4412 & via email at kserna@hawaii.edu]. If you have any questions about rights of research participants in this project, you can contact the University of Hawai'i, Human Studies Program, by phone at (808) 956-5007 or by e-mail at .

If you agree to give your permission, as the administrator, for such research to be conducted at Leeward Community College, please sign below.

I give Jaydene Kale'a Silva permission to conduct research regarding the factors influencing the educational and career goal attainment of future teachers at Leeward Community College.

Administrator Signature (Chancellor Manuel Cabral)

Date

Appendix I: Sample of Program Coordinator Consent Form to Conduct Research

To: Roberta Martel
AAT Program Coordinator, Leeward Community College

From: Jaydene Kale'a Silva
Instructor, Associate of Arts in Teaching Program

I am currently engaged in research as part of my doctoral program at University of Hawai'i Mānoa in the College of Education, Curriculum Studies Department. The research seeks to determine factors that influence the educational and career goal attainment of future teachers at Leeward Community College. As part of the research process, I will be collecting data from our Institutional Research Office, from past and current Leeward documents or reports through the Banner system, as well as survey and interview data from current and former AAT students at Leeward.

Student participation in this research will be voluntary. If students decide not to fill out the survey or engage in an interview, it will not affect their academic standing in any way. At no time will any indentifying material be used in such a way as to indentify students personally. At no time will any specific information be used without students' express written consent.

If you have any questions about this project, please contact me via phone (808) 455-0397 or e-mail (jaydene@hawaii.edu). You can also contact my faculty advisory, Dr. Ku'ulei Serna, at [808-956-4412 & via email at kserna@hawaii.edu]. If you have any questions about rights of research participants in this project, you can contact the University of Hawai'i, Human Studies Program, by phone at (808) 956-5007 or by e-mail at .

If you agree to give your permission, as the administrator, for such research to be conducted at Leeward Community College, please sign below.

I give Jaydene Kale'a Silva permission to conduct research regarding the factors influencing the educational and career goal attainment of future teachers at Leeward Community College.

Administrator Signature (Program Coordinator – Roberta Martel)

Date

Appendix J: Copy of Human Subjects/IRB Approval



UNIVERSITY
of HAWAII
MĀNOA

Office of Research Compliance
Human Studies Program

October 24, 2013

TO: Jaydene R.K. Silva
Principal Investigator
College of Education – Curriculum and Instruction

FROM: Denise A. Lin-DeShetler, MPH, MA
Director

A handwritten signature in black ink, appearing to read 'Denise A. Lin-DeShetler'.

SUBJECT: CHS #21588- "Impact of the Associate of Arts in Teaching Program on Participants' Educational and Career Goal Attainment: A Multiple Case Study"

This letter is your record of the Human Studies Program approval of this study as exempt.

On October 24, 2013, the University of Hawai'i (UH) Human Studies Program approved this study as exempt from federal regulations pertaining to the protection of human research participants. The authority for the exemption applicable to your study is documented in the Code of Federal Regulations at 45CFR 46.101(b)(Exempt Category 2).

Exempt studies are subject to the ethical principles articulated in The Belmont Report, found at <http://www.hawaii.edu/irb/html/manual/appendices/A/belmont.html>.

Exempt studies do not require regular continuing review by the Human Studies Program. However, if you propose to modify your study, you must receive approval from the Human Studies Program prior to implementing any changes. You can submit your proposed changes via email at uhirb@hawaii.edu. (The subject line should read: Exempt Study Modification.) The Human Studies Program may review the exempt status at that time and request an application for approval as non-exempt research.

In order to protect the confidentiality of research participants, we encourage you to destroy private information which can be linked to the identities of individuals as soon as it is reasonable to do so. Signed consent forms, as applicable to your study, should be maintained for at least the duration of your project.

This approval does not expire. However, please notify the Human Studies Program when your study is complete. Upon notification, we will close our files pertaining to your study.

If you have any questions relating to the protection of human research participants, please contact the Human Studies Program at 956-5007 or uhirb@hawaii.edu. We wish you success in carrying out your research project.

1900 East-West Road
Biomedical Sciences Building B104
Honolulu, Hawai'i 96822
Telephone: (808) 956-5007
Fax: (808) 956-8683

An Equal Opportunity/Affirmative Action Institution

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