

The CAST Initiative in Guam: A Model of Effective Teachers Teaching Teachers

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The CAST (content area specialized training) model of professional development enables sustainable teacher leadership and is responsive to the need for culturally relevant educational practices. The purpose of this paper is to share the background, methods, findings and recommendations of a case study on the CAST initiative in Guam. The case study is worth a look given that 100% of the participants in the CAST initiative indicated that they were satisfied with the CAST model of professional development.

Keywords: teacher's educational research, curriculum and teaching research, comparative education, sustainable professional development

Introduction

Education Reform Movements

Tsunamis necessitate the need to rebuild and renew. Education reform movements seem to engulf schools like a tsunami. Statistics from standardized tests and international comparisons have been used to launch waves of reform in US schools. Since the shock of Sputnik in 1957, the practice of American schooling has fallen under public and legislative scrutiny. *The National Commission on Excellence in Education: A Nation at Risk* (1983), the *Goals 2000: Educate America Act* (1994) and the *NCLB* (*No Child Left Behind*) *Act* (2002, January) are examples of national reports that have swept over the schools and changed the landscape of education over the past two decades. Since the 1980s, the resulting educational reform movements have progressed through stages that have been summarized as the excellence movement, the restructuring movement, the standards movement and the accountability movement (Hunt, 2008).

Education Reform in the Territory of Guam

In the past two decades, there have also been numerous educational reform movements in the Asia-Pacific regions (CHENG, 2001; CHENG & Townsend, 2000). Nearly all countries in the Asia-Pacific region are engaged in some aspects of school restructuring and education reform in an attempt to prepare students for competing in the technology-rich and knowledge-based global economy. Asia-Pacific region geographic school reform movements and political US educational policies combine to influence the territory of Guam.

Guam is the largest island in Micronesia. The territory of Guam is an island in the Western Pacific Ocean that is an organized, unincorporated insular area of the US. The island was taken from Spain by the US during

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the Spanish American War in 1898. The anticipated US military expansion on Guam during the years 2010-2014 is expected to cause a dramatic population increase that will significantly impact changes in education and infrastructure. Consequently, US education reform movements predominantly influence the public school system in the territory of Guam.

Beginning in 2003, school districts in the territory of Guam experienced a wave of direct instruction in English and mathematics. Direct instruction is described as a method of teaching that provides teachers with field-tested and research-based scripted lesson plans delivered in a structured classroom environment. "The Reading First" direct instruction program was implemented in all 25 of 26 GPSS (Guam public school system) elementary schools beginning in the 2003-2004 academic year to address the progressive decline of local public school students' SAT-9 (Stanford achievement test, 9th ed.) results. Test results consistently placed the majority of Guam's public school students at levels below national counterparts. Guam educators hoped the 5-year implementation of the direct instruction reading program would improve students' reading skills at all grade levels from kindergarten to grade 5.

Direct instruction was designed to teacher-proof curriculum and instruction as a means of uniformly raising content standard achievement for all students. The *NCLB Act* (2002) focused school improvement and staff development to areas specifically tested to determine if schools were making AYP (adequate yearly progress). AYP is primarily determined through state-developed and commercially prepared standardized tests. Researchers found that 71% of the elementary schools in the Center of Education Policy Study (2006) had decreased or even eliminated time devoted to subjects other than language arts and mathematics in order to maximize time for instruction in these tested AYP subject areas.

Funding and Legislation

Legislation and funding serve as major catalysts for education reform movements. The *NCLB Act* (2002) legislation has served as the driving force of school restructuring and professional development of highly qualified teachers across schools in the US and in the territory of Guam. The *NCLB Act* (2002) mandates are accompanied by some increased funding but also deliver a series of punitive sanctions if prescribed quotas are not met.

Federal funding from sources like *Grants 2000* have historically infused school improvement and staff development efforts. There is hope that President Obama's economic stimulus plan will revitalize and renew school districts with a proposed \$150 billion dollars of new federal spending invested in the Department of Education budget. In addition to federal funding, education grant money further supports education reform movements.

The CAST Grant

In the territory of Guam, a new grassroots education reform movement has begun among education professionals. The UOG (University of Guam) was awarded the CAST grant project aimed at meeting two major goals. The first goal is to design, initiate, implement and manage an effective professional development program for grades K-12 teacher leaders that will (1) strengthen content knowledge in language arts, mathematics, science and social studies; and (2) enhance pedagogical content knowledge and skills for instructional support. The main objective is to strengthen content knowledge of K-12 teacher leaders and develop their content understanding across the K-12 spectrum through the CAST professional development model. The CAST project's second goal is to design, initiate, implement and manage an effective professional development program for teacher leaders that will improve leadership practices, which aimed at sustaining

positive change. Practicing K-12 teacher leaders in Guam have developed the skills and dispositions to deliver professional development opportunities to their colleagues across the K-12 spectrum including language arts, mathematics, science and social studies. The teachers who participated in the CAST professional development model were successful in leading a professional development conference, targeting content knowledge and pedagogical skills in English, math, science and social studies, which approximately 250 public school teachers in Guam. The CAST project respectfully returned curriculum and instruction decisions to education professionals who have content expertise and pedagogical knowledge and skills for teaching in a unique cultural milieu.

Literature Review

Reform movements will fail without teacher buy-in, training and support. Reams of educational research whisper the simple truth: Quality teachers positively impact students' achievement levels. Teachers are the most significant influence on students' achievement (Darling-Hammond, 1997, 2000; Education Commission of the States, 2000, 2003; Education Testing Services, 2004; Rice, 2003; Sanders & Rivers, 1996).

An effective teacher is the single most important factor affecting student learning. It's more important than standards, more important than class size, more important than how much money is spent. Each of these is significant, but the quality of teaching dwarfs them all. (Education Commission of the States, 2000, p. 1)

The UNESCO (United Nations Educational, Scientific and Cultural Organization) International Institute for Educational Planning (2007) summarized global perspectives on teacher learning and professional development. The UNESCO (2007) report stated that no reform measure can be effective without the active support of teachers. "The teacher is at the epicenter of the learning process; and learning therefore depends first and foremost on the quality of the teacher" (Schwille & Dembele, 2007, p. 15). There is a general agreement that continuous training and professional development in the areas of content knowledge and the teachers' competence in transmitting this knowledge to different students are essential for improved academic performance across global classrooms.

The goals of the CAST project are aligned with research recommendations for continuous training and professional development of teachers' content knowledge and pedagogical skills. The UOG has entered a collaborative partnership with educators from the UH (University of Hawaii) to offer training workshops to prepare teachers to be content and pedagogical leaders in Guam. As part of this process, CAST participants were surveyed to gain their perspectives on teachers' professional development needs in Guam.

Methodology

Background

The GPSS is a single unified school district consisting of 25 elementary schools, 7 middle schools, 4 high schools and an alternative school that serves over 30,000 students. The UOG recruited 5 content area specialists from the UH as consultants to the GPSS and project CAST. The UH consultant team was charged with providing PD (professional development) to 29 Guam CAST teachers in science, social studies, English/language arts and mathematics. The PD sessions were designed with a two-fold purpose: (1) To increase CAST members' subject area content and pedagogy knowledge and skills; and (2) To develop CAST members' content expertise and leadership skills to a level where they would be able to serve as teacher leaders and support personnel for the GPSS schools. All CAST teachers were expected to develop a K-12 perspective

of the quality content and promising pedagogical practice for their content area. The following year, CAST teachers worked with UH support faculty to successfully plan and implement a content-based CAST conference to energize approximately 250 public school teachers in Guam as they prepared to return to school in the fall.

Demographics

The CAST cohort of teachers consisted of 29 teachers with 23 (79%) responding to the demographic portion of the survey. CAST teachers ranged in age from 20-70 years old, with the majority (83%) falling in the 31-60 years old range (see Figure 1).

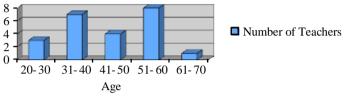


Figure 1. CAST participant ages.

The years of experience for CAST teachers also varied considerably, ranging from 0-35 years of experience, with no less than two and no more than 5 teachers being part of any 5-year grouping (see Figure 2).

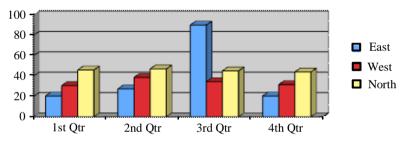


Figure 2. CAST participants' years of teaching experience.

CAST Teacher Group Composition

All CAST teachers were employed by the GPSS system. Participants were chosen from 4 content areas and elementary, middle and high school placements. Ten of the 22 responding CAST teachers (43%) are currently teaching science, while 7 (32%) are teaching math, 4 (17%) are teaching social studies, and 2 (9%) are teaching language arts.

With respect to grade level taught, 4 of the 22 responding teachers taught elementary school (grades 4 and 5), 11 taught middle school (grades 6, 7 and 8) and 7 taught high school (grades 9-12) (see Figure 3).

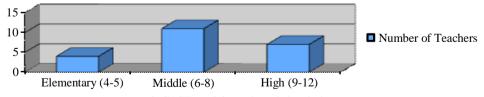


Figure 3. CAST participants' grade level placements.

Procedure

The CAST professional development leadership training sessions occurred in 3 phases: (1) a face-to-face 5-day session in July with two 90-minute content and pedagogy sessions and one 90-minute leadership session each day; (2) online follow-up sessions with each content group of teachers throughout the fall semester; and (3) a

face-to-face follow-up session at the end of December. CAST teachers were surveyed throughout the project to determine their impressions of the PD. Each CAST consultant employed 3 methods of data collection during their sessions: (1) unstructured group interviews; (2) participant observation; and (3) semi-structured group interviews with open-ended questions. The 4th and final phase of the CAST initiative began with a reunion between the CAST teachers and their UH support faculty. One year after the initial CAST professional development leadership training sessions, CAST teachers and UH consultants reunited for the weeklong face-to-face planning and implementation of the back-to-school conference for 250 public school teachers in Guam.

Unstructured group interviews. CAST teachers were asked to describe their experience as a cohort member in a free flowing discussion format. CAST consultants listened to the responses and asked probing questions to gain a deeper understanding of the participant's views of the PD sessions.

Participant observation. CAST teachers were observed during the PD sessions to determine how they applied the new instruction, what parts of the instruction they were having problems with, and what parts of instruction they could most easily apply in their classrooms. CAST consultants noted similar and disparate events for use in the coding process.

Semi-structured group interviews with open-ended questions. CAST teachers were asked during each training session for their feedback on the sessions: (1) what they liked; (2) what they found useful; (3) what could be applied in their classes; and (4) what they more would like instruction on. CAST consultants listened to the responses and asked clarifying questions if responses were unclear or incomplete.

The following two methods were used at the end of the PD sessions: (1) focus groups; and (2) questionnaires.

Focus groups. During the final stage of the week long CAST PD, the content area teacher groups were brought together to discuss the strengths and weaknesses of the PD sessions. CAST consultants listened to the responses, took notes and moderated the discussions. CAST group members were encouraged to freely express their opinions and offer detailed responses to the questions asked.

Questionnaires. During the final stage of CAST PD in December, the entire group was brought together to discuss the strengths and weaknesses of the PD sessions. CAST consultants administered a survey (see Appendix) to determine what areas of the PD were beneficial and what needed to be improved upon.

Evaluation of the Data

The raw data were examined and problematic data, such as incomplete responses (e.g., survey not fully completed) or questionable entries (e.g., inconsistent responses) were removed from the sample.

Analysis of the data. A descriptive method was used to analyze the data in order to provide a summary of the information gathered and to describe the results obtained. Visual representations including charts and simple statistical measures were used to obtain a feel for how the respondents viewed the PD sessions. Written responses to the surveys, verbal responses in interviews and responses recorded via field notes were recorded verbatim.

Coding. A grounded theory approach was used to code the open-ended data (Strauss & Corbin, 1990). All participant responses were read and re-read by 3 CAST consultants who independently discovered the properties associated with the data. The CAST consultants then shared their notes with one another, discussed their findings, and negotiated the mutually agreed upon findings.

Open coding was used to identify and categorize the relationships described by the data. CAST consultants used the question "What are the perspectives of the CAST teachers on their perceived professional development

needs and their satisfaction with the CAST workshops" as the lens through which they examined the open-ended survey responses and textual material. As relationships in the data were discovered, axial coding was used to relate these relationships to a general framework. The final step in the coding process involved selective coding, where the CAST consultants examined all of the themes that emerged from the data and determined the core theme that best represented all of the data. This core theme that became apparent from the data was that while the PD sessions were deemed to be valuable for the CAST participants, there was still a perceived need for even more content area instruction and strategies that can be applied in their classrooms and for PD. For example, while 96% of the CAST teachers found the ideas, content and strategies presented in the PD sessions to be either "Useful" or "Very useful", the majority of respondents wanted even more strategies in their content area and strategies for professional development. The 5 general themes that emerged from this analysis can be found in the results section.

Data triangulation. The data was triangulated in two ways: (1) Investigator triangulation, where multiple CAST consultants observed and analyzed the data at every phase of the process, sharing their findings and negotiating the final outcomes; and (2) Methodological triangulation, where multiple methods: (a) unstructured group interviews; (b) participant observation; (c) semi-structured group interviews with open questions; (d) focus groups; and (e) questionnaires, were used to collect the data.

Data analysis. *Likert-type scale responses.* The survey contained 5 items that required a Likert-type scale response. CAST teachers were asked to circle the response that described: (1) how ready they feel to begin offering professional development; (2) how closely the content of CAST aligned to the standards; (3) if their participation in CAST met their expectations; (4) how likely were they to share the ideas gained through CAST participation with others; and (5) how useful were the CAST ideas, content and strategies in their future professional development as teachers. The choices varied for each question and are identified (see Figure 4).

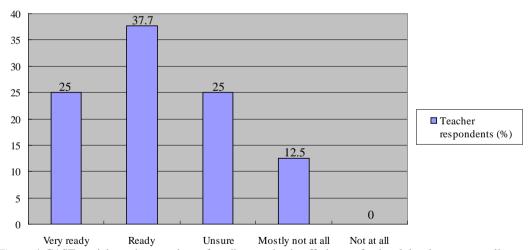


Figure 4. CAST participants' perceptions of readiness to begin offering professional development to colleagues.

Responses to the first Likert-scale question revealed that 37.5% of the CAST members felt ready to begin offering professional development, while only 25% indicated they were very ready to conduct professional development to their colleagues. Only 12.5% indicated they were mostly unsure about offering professional development (see Table 1).

For the second Likert-scale question "How closely was the content of CAST aligned to the standards",

58.3% reported "Very closely", while no one selected "Mostly not at all" or "Not at all". Interestingly, 20.8% indicated they are unsure if the content was aligned to the standards.

Table 1
Percentage of CAST Respondents Perceptions on Training Received

Questions	Range of responses				
Question 1:					
How ready do you feel to begin offering professional development to your colleagues?	Very ready	Ready	Unsure	Mostly not at all	Not at all
	25	37.5	25	12.5	0
Question 2:					
How closely was the content of CAST aligned to standards?	Very closely	Closely	Unsure	Mostly not at all	Not at all
	58.4	20.8	20.8	0	0
Question 3:					
	Very useful	Useful	Unsure	Mostly not at all	Not at all
Did participation in CAST meet your expectations?	62.5	29.2	8.3	0	0
Question 4:					
How likely are you to share ideas you gained through CAST participation with others?	Very likely	Likely	Unsure	Mostly not at all	Not at all
	87.5	8.3	4.2	0	0
Question 5:					
How useful are the CAST ideas, content and	Very useful	Useful	Unsure	Mostly not at all	Not at all
strategies in your future professional development of teachers?	75	20.8	4.2	0	0

"Did participation in CAST meet your expectations" was the 3rd Likert-scale question. In response to this question, 62.5% indicated that participation in CAST was very useful and 29.2% selected that their participation was useful.

The 4th Likert-scale question asked CAST members how likely they are to share ideas gained through their participation in this program. Overwhelmingly, 87.5% responded that they were very likely to share their new ideas with other teachers. Only 3 respondents, or 12.5%, stated they were likely or unsure if they would share ideas.

The final Likert-scale question in the survey focused on how useful the CAST ideas, content and strategies were in their future professional development as teachers. In response to this question, 75% said they found the information very useful while 20.8% indicated it was just useful.

Rank-order responses. The survey contained one question related to: "What CAST teachers would like to receive more training in". Participants in the survey were asked to rank, by priority, 3 choices for more training. The choices given were content knowledge, instructional strategies and leadership. The ranking was done with 1="Most important", 2="Somewhat important" and 3="Least important". Of all 24 respondents, participants ranked instructional strategies as number one, content knowledge as number two and leadership as the number 3 priority for future choices in training.

Open-ended responses. The survey contained 6 open-ended questions. One question related to "Why teachers chose to participate in CAST". The second question "What they found to be most beneficial in CAST". The 3rd question asked for suggestions on improving future CAST workshops. Question 4 asked "How participating in CAST has helped them feel more confident about offering professional development to

colleagues", while the 5th question addressed the issue of "What type of follow-up or support would they like to receive that would be most useful". The final question asked CAST members "If they are experiencing any frustrations in trying to implement positive changes within their work environment".

The responses to the open-ended questions can be broken down into themes. These themes became apparent after coding each response to each question and grouping them into common categories. By investigating the themes, the CAST teachers are better able to adapt future presentations in a way that is most beneficial to all CAST cohort members.

(1) Open-ended Question One: Four themes emerged from answers (see Table 2) to address the first open-ended question "Why did you choose to participate in CAST". The first prominent theme was that CAST teachers (14 respondents) wanted to learn more strategies for professional growth. A science teacher with 13 years of teaching experience wrote, "I enjoy learning about new ways that I can enhance teaching and learning in my classroom". A math teacher with one year of teaching experience stated, "I was informed this would jump start my career as a professional". The second theme 6 CAST teachers identified as one of the reasons to join CAST was that it would be used for credits necessary for certification renewal. Four members stated that it was peer-pressure that prompted them to join, while two CAST members stated, "I could be a part of change".

Table 2
Reasons for Participating in CAST

Emergent theme	Number of respondents
Strategies for professional growth	14
Credits	6
Peer pressure	4
Agents of change	2

(2) Open-ended Question Two: The second open-ended question "What did you find most beneficial in CAST", generated an array of themes. These themes can best be explained in Table 3.

Table 3

CAST Teachers' Perceptions of What They Found to be Most Beneficial in CAST

Emergent themes	Number of respondents	
Strategies in content area	11	
Strategies for professional development	7	
Interaction with colleagues	5	
Professors from Hawaii who conducted CAST	3	
Strategies to use thinking maps	2	
Encouragement from others	1	
To implement change	1	
Credits for recertification	1	

Note. The total number of respondents is not equal to 100% as some respondents identified more than one theme.

(3) Open-ended Question Three: "Needs to be more content-based" was the dominant theme for question 3. This question asked CAST teachers to offer suggestions for improving future CAST workshops. Thirteen

cohort members specifically stated that they would like more content strategies. Three members of CAST identified the need for more follow-up, and two participants said there were no suggestions for improvement (see Table 4).

Table 4
Suggestions for Improving Future Training

Emergent themes	Number of respondents
Strategies in content area	13
Follow-up	3
No suggestions	2

(4) Open-ended Question Four: The 4th open-ended question asked "Has your participation in CAST helped you feel more confident about offering professional development? How has it helped you?". The overwhelming majority of CAST participants (16) identified the major theme for this question: Yes, I feel more confident to share ideas with colleagues (see Table 5). A 15-year-experience science teacher stated, "Yes it has, because I feel that being with the CAST has made me realize that there is so much that needs to be done for our teachers and our kids... there just aren't enough people who are committed to finally do something about improving our schools". In addition, 5 CAST teachers stated they had gained a little more confidence in offering professional development, one stated they feel the same as far as their confidence, one said they needed more development, and one said "not really".

Table 5

CAST Teachers' Confidence Level After Training

Emergent themes	Number of respondents
Increased confidence	21
Same level of confidence	2

(5) Open-ended Question Five: "What type of follow-up or support to the CAST workshop would be most useful to you" was the 5th open-ended survey question. Seven prominent themes emerged from the CAST teachers' responses. These themes are displayed in Table 6.

Table 6
Needs of CAST Teachers for Follow-up Sessions

Area of follow-up	Number of respondents
CAST should meet every year	7
More instructional strategies	5
Technology integration	3
More help with implementing professional development	3
Feedback from instructors	3
Sharing instructional strategies from other content areas	2
Constructive criticism from instructors	1

The final open-ended question of the survey asked CAST teachers if they were experiencing any frustrations in trying to implement positive changes within their work environment. Of the members who said they were frustrated, they identified 4 areas of difficulty. These difficulties included: (1) time for professional

development; (2) funding for professional development; (3) colleagues that were resentful of professional development or do not understand why they have to make changes; and (4) lack of support from their administrators. Five CAST teachers said they were not experiencing any frustrations.

The Culminating Conference Was Successful

Approximately 250 K-12 teachers, administrators and media reporters attended the 5-day back-to-school professional development conference led by CAST teachers and CAST consultants. Participants in the conference were surveyed on the fifth and final day of the conference to reveal their perceptions of the CAST conference. One hundred and fifty-nine participants voluntarily completed the CAST Conference survey.

The CAST Conference Was Satisfying for Participants

100% of the CAST Conference participants circled "Satisfying" or "Very satisfying" on a 5-point Likert-scale ("Very satisfied"; "Satisfied"; "Neutral"; "Unsatisfied" and "Very unsatisfied") in response to the question "How satisfied were you with the CAST Conference?". The majority of participants, 144/159 or 91% indicated that they were very satisfied with the CAST Conference and 15/159 or 9% of the participants thought the CAST Conference was satisfying. This extremely positive satisfaction response rate about the CAST Conference confirmed the success of the CAST professional development model in meeting CAST goals: To strengthen teacher leaders' content knowledge and skills and equip teachers to serve as professional development facilitators.

Participants were also asked "If a CAST Conference is offered in the future, would you attend?". 100% of the participants responded that they would attend a future CAST Conference. Participants remarked that learning from each other and from teachers working in other schools in Guam was a great way to see how and why specific content strategies work with our local students. "Engaging", "applicable" and "practical" were the most common adjectives used by participants to describe the content area strategies modeled during the CAST Conference. One participant summarized, "Unlike other classes, I actually looked forward to coming to these practical CAST classes".

CAST Conference participants were able to name 3 specific activities, strategies or other teaching tools that they learned about in the CAST Conference that they would use in their classroom in English, math, science and social studies. 100% of survey completers, 159/159 participants, identified strategies that they planned to use further confirms that participants found the CAST professional development model to be satisfying and practical. Participants gained a common vocabulary and common set of strategies to help them collaborate with colleagues as they continuously experiment with and reflect on the effectiveness of instructional strategies on positively impacting students' achievement throughout the school year.

Discussion

The purpose of the CAST professional development model is two-fold. The first goal is to help CAST teachers strengthen their content knowledge and enhance their pedagogical content skills to become K-12 teacher leaders. The second objective is to help the CAST teachers improve their skills in implementing professional development. This discussion of data investigates how the implications of the findings relate to the purpose of the CAST initiative.

In regards to helping CAST members strengthen their content knowledge in language arts, math, science and social studies, the data indicated that the strategies gained in the content areas were beneficial to the CAST

teachers and CAST Conference participants. As one science teacher with 15 years of teaching experience stated, "It was beneficial learning more strategies, ways of improving myself as a teacher, and gaining more confidence".

The CAST teachers and participants both expressed the desire to continue to offer CAST workshops in the future. "Keep funding the cadre members. Seriously, CAST teachers still would like training with more instructional strategies in their content areas" was a comment given from a social studies teacher with 28 years of teaching experience. This desire for continuous content-based pedagogical support was apparent in both the CAST teacher training surveys and the CAST Conference participant satisfaction surveys.

To determine if the second goal of CAST is being met, to develop the skills and dispositions to deliver professional development opportunities across the K-12 curriculum, the data indicated that the CAST project is on its way to achieving this goal. After the initial CAST training workshops, 87.5% said they are likely to continue to share the ideas they have learned with their colleagues. The 100% satisfaction rating of CAST conference participants confirms that the CAST professional development model is successful in developing skills and dispositions to deliver sustainable professional development sessions embedded in real-life teaching practices in Guam.

Recommendations

Findings from this case study reveal that developing teacher leaders need professional support or co-teachers when first going public. Based on the perceptions of the CAST teacher participants, the CAST facilitators decided to provide 3 days of additional professional development with content area strategies and to team-teach the 5-day content area workshops at the culminating back-to-school conference with Guam public school teachers. The data revealed that CAST teachers were hesitant to solo-teach their peers, so the CAST consultants provided additional support by returning to Guam the second summer to offer additional strategies, co-plan and co-present conference sessions. It is strongly recommended to develop teacher leaders, particularly teacher leaders in the Asia Pacific region, who respect humility and service, receive this type of collaborative support for the first implementation of public professional development sessions.

It is also recommended that CAST consultants work with administrators in addition to teacher leaders to find ways to build bridges between school administrators and the new ideas associated with the CAST professional development model. CAST teachers and conference participants were enthusiastic about implementing new content area strategies with their students but were concerned about their administrators' response towards the new strategies. It is suggested that time be set aside for representatives of the CAST initiative to meet with current school administrators and try to find ways to incorporate the goals of CAST into the upcoming school year to maximize the positive impact of this teaching model on students' academic achievement.

Survey responses indicate that local teacher leaders and conference participants desire continuous professional development that is culturally relevant to the context where teaching and learning take place. All CAST participants were satisfied with the CAST professional development model yet all CAST participants also requested that the CAST initiative continue each year. Investing in local teacher leadership appears to be an effective model of sustainable professional development provided that the developing teacher leaders are continuously supported and not left dangling alone as they risk making instructional changes aimed at increasing students' achievement.

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Appendix: CAST Participant Survey

CAST Participant Data	a:			
	Age:			
	Content Area:			
	Number of Years Teac	ching Experience:		
	Current Teaching Place	ement (Grade Level of Stu	idents):	
Instructions: Please rea	ad each question and place a	check ($$) in the appropriate	te box.	
1. How ready do you f	eel to begin offering profess	ional development to your	colleagues?	
Very ready				Not at all
2. How closely was the	e content of CAST aligned to	o standards?		
Very closely				Not at all
3. Did participation in	CAST meet your expectation	ns?		
Very useful				Not at all
4. How likely are you	to share the ideas you gained	l through CAST participati	on with others?	
Very likely				Very unlikely
П	П	П	П	П

THE CAST INITIATIVE IN GUAM: A MODEL OF EFFECTIVE TEACHERS

5. How useful are the CA	ST ideas, content and str	rategies in your future professi	onal development of t	eachers?
Very useful				Not at all
Instructions: Please read t	he question and write yo	our answer in the box below.		
6. Why did you choose to	participate in CAST?			
7 What did find	than finial in CASTS			
7. What did you find most	t beneficial in CAST?			
8. What suggestions do yo	yu hava for improving fi	utura CAST workshops?		
6. What suggestions do yo	ou have for improving it	iture CAST workshops:		
9 Has your participation i	in CAST helped you fee	l more confident about offering	nrofessional develor	ment to colleagues?
How has it helped?	in CABA helped you lee	i more comident about onerm	g professional develop	oment to concagues:
Content Kne	-			
Instructiona	1 Strategies			
Leadership				
10. What type of follow-u	p or support to the CAS	T workshop would be most us	eful to you?	
J.	r	r	J	
11. Are you experiencing	any frustrations in trying	g to implement positive change	es within your work e	nvironment? Please explain
12. Do you prefer to offer	professional developme	ent as a part of a team or alone	? Why?	