EDC/CCT Formative Evaluation of the Intel® Teach to the Future Leadership Forums 2005 FINAL REPORT

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EXECUTIVE SUMMARY

This report presents findings from a formative evaluation of the Intel® Teach to the Future Leadership Forums, conducted by Education Development Center, Inc.'s Center for Children and Technology (EDC/CCT). These forums were created by Intel® Innovation in Education as a professional development experience for K-12 educational leaders to help these leaders promote and support technology integration in their schools and districts to improve teacher effectiveness and enhance student achievement.

Methods

To gain an understanding of participants' experiences with the Leadership Forums —led by both Senior Facilitators and Master Leaders — and Master Leader Trainings, and how participants might build on these experiences in their local communities, the research team employed multiple methods for acquiring data, including surveys, interviews and email correspondences, and observations at trainings.

Surveys

Two types of online surveys were employed for this evaluation: surveys that took place at the end of a training experience (i.e. End-of-Forum Survey and Response to Master Leader Training Survey), and a Follow-up Survey. The End-of-Forum Surveys were disaggregated according to who led the training (i.e. Senior Facilitators or Master Leaders).

Training Observations

Observations at Leadership Forums and Master Leader Trainings took place between February and August 2005. The purpose of these observations was to explore the different delivery methods of the forums (i.e. those led by Senior Facilitators and those led by Master Leaders) and participants' responses to these events.

Phone interviews and email reflections

Thirteen phone interviews with Participant Leaders who had been trained by Senior Facilitators were conducted. These interviews explored the roles that technology integration plays in participants' local schools and districts and how the forums contributed to this process; participants' response to the forums and how they had (or had not) followed-up on the action plans they began to create during the forum; and what were the responses they had received to their action plans locally.

Key Findings

This report presents a discussion of the following findings:

General Leadership Forums Program

- Of the total population of participants involved in Leadership Forums during February 11, 2005 August 31, 2005 (N=1566), Participant Leaders trained by Senior Facilitators made up the largest portion (94%) (See Figure 1 and Table 1). Only 4% of the total participants were trained as Master Leaders, who in turn, trained 2% of the total number of participants.
- The majority of participants across all formats of the Leadership Forums identified themselves as school principals.

Senior Facilitator-Led Leadership Forums

- Participants came to the forums with a wide range of expectations, which were met to varying degrees by specific portions of the Forum curricula.
- Action plan development was loosely guided, and participants took widely differing approaches to the task.
- Turning Point and *Visual Ranking* exercises, both intended to model technology use in an instructional setting, play very different roles in the forum experience.
- Several months after participants attended a training, the Leadership Forums remained a sturdy bridge to the professional development programs Intel® Teach to the Future offers

teachers and administrators, though scheduling participation in these programs was proving difficult for some.

- The generally positive view Participant Leaders had of the Leadership Forums upon completing the training had not changed with time although, in general, their actual use of the resources and action plans had not materialized as they had anticipated.
- Because there was general consensus among educational leaders drawn to the forums about the importance it places on meaningful technology integration at the classroom level, several Participant Leaders said they welcomed additional opportunities to develop their skills and action plans.

Master Leader Training

- Administrators seek out Master Leader Training based on Intel's solid reputation as a provider of high-quality educational resources and professional development in their schools and districts.
- To make the Leadership Forums relevant to local needs, administrators reported they preferred to adapt aspects of the training, such as scheduling procedures and curricular activities, rather than strictly adhere to the turn-key model.
- Although administrators generally reported they felt prepared to offer their own Leadership Forum, many participants expressed uncertainty about what was expected of them and how well equipped they were to serve as an official Master Leader.

Master Leader-Led Leadership Forums

- Districts that had a clear sense of how the Leadership Forum training fit with broader district priorities concerning technology integration, especially as it related to teacher and administrator professional development, were the early adopters of the train-the-trainer program.
- As Master Leaders rolled out the Leadership Forums to their colleagues, they localized the language, content and structure to better meet administrators' needs and expectations.
- Despite Master Leaders' efforts to localize the Leadership Forums they led, it was still unclear
 if and how participants would sustain their use of their personalized action plan beyond the
 in-person training experience.

Recommendations

The report contains recommendations related to the basic structure of the Leadership Forums and issues to consider as the train-the-trainer model moves toward Regional Training Agency (RTA) and Local Education Agency (LEA) coordination and localized ownership.

• Incorporate the combination of goals that Participant Leaders have expressed interest in developing (i.e. concrete strategies and visions of technology integration) into the forum so that both are actively addressed and discussed. Although administrators often experience tension learning how to help their teachers acquire concrete strategies for their classroom and developing a school- or district-wide vision they can implement over time, both are important components of technology integration. As Stanford Educational Leadership Institute's *School Leadership Study* suggests, "Growing consensus on the attributes of effective school principals shows that successful school leaders influence student achievement through two important pathways — the support and development of effective teachers and the implementation of effective organizational processes."¹ Accomplishing these

¹ According to the *School Leadership Study: Developing Successful Principals*, a report published through the Stanford Educational Leadership Institute (SELI), "Principals play a vital role in setting the direction for successful schools, but existing knowledge on the best ways to prepare and develop highly qualified principals is sparse." To help remedy the lack of understanding about what makes a leadership development program effective, the study will examine eight highly developed pre- and in-service program models to address key issues in developing strong leaders. Findings from the study will be published in December 2006 though a review of existing research and literature was published in August 2005. (See: http://seli.stanford.edu/research/sis.htm) Although Intel's Innovation in Education Leadership Forums Program is of a different nature than the programs in this study — each one is focused on a particular school

dual goals through the Leadership Forum will require an acknowledgement of the diversity of participants and their multi-tiered needs. Some administrators come to a forum expecting to see what "good instructional technology looks like" while others come to consult with colleagues about far-reaching leadership strategies.

• Address the diverse audience of Leadership Forums more specifically. Because technology directors, principals, and superintendents all see their priorities for technology integration to be slightly different due to the role they play in an educational community, including an explicit conversation around this topic would be helpful. Using the *Visual Ranking* exercise as a springboard into this discussion might be one possibility. Including a prompt to do this in the Master Leader and Senior Facilitator notes in the curriculum guide would also help.

Communicate a clear set of goals, commitments, and expectations for all phases of the Leadership Forum process (e.g. recruitment, commitment, scheduling procedures) OR allow trainers to define the goals they wish to pursue. Using a train-the-trainer model, as the Master Leader Trainings do, as a recruitment strategy makes the most sense in large districts where the demand for trainings is highest. However, the person who is likely to serve as a Master Leader in these districts also will have other professional development responsibilities. In an effort to meet a range of needs cutting across multiple programs and responsibilities, the forum's delivery and substance may have to be adapted. While there is value in inserting local concerns into the curriculum, if it is the priority to preserve the integrity of the Leadership Forum, a concept of localization that foregrounds this priority is important. Master Leaders and Local Education Agencies (LEAs) will need to understand what is expected of them and what falls under their discretion. This might include:

- Defining how LEAs go about selecting people to become Master Leaders;
- Including Master Leaders in a conversation about commitment, expectations, and skill sets necessary to lead a training prior to agreeing to become a Master Leader;
- Communicating the technology specifications for where the Leadership Forum will be held;
- Giving districts the option of using co-trainers;
- Articulating what it means to "localize" a Leadership Forum in Master Teachers' districts; and
- Encouraging districts to embed the Leadership Forum into an existing and/or broader leadership training program.
- Consider the range of educational leaders who are being selected to be Master Leaders and either adjust the requirements for Master Leaders or include additional supports in the training materials. Master Leaders who are also Master Teachers come to the Master Leader Training (and the Leadership Forum) with a familiarity of the Intel® Teach to the Future programs and training experience as Master Teachers. However, other Master Leaders that do not have this experience will need additional resources to become familiar with Intel Teach to the Future. Also, not all of the Master Leaders come to the training as experienced professional development facilitators or being comfortable with facilitating trainings with technology. Those who do not have these background experiences also may need additional supports (beyond the Master Leader Performance Rubric, Turning Technologies online support, or Intel® Customer Service) to improve upon their skills in order to lead effective Leadership Forums in their schools or districts and to be comfortable leading these trainings.
- Identify support strategies and mechanisms that will help administrators continue to use their action plans beyond the four-hour session. Administrators, like all learners, require ongoing support in order to change habits and deepen their understanding of

district of school of education — it is worth placing the Leadership Forums in the broader context of this study as the program matures and potentially takes new shape.

technology integration. A single event, such as a four-hour, face-to-face session, can begin this process but is unlikely to sustain it. While it may not be possible for Intel® Innovation in Education to offer additional trainings formally, encouraging districts to build in follow-up supports mechanisms will give the program a longer life locally.

• Separate the Master Leader Training from the Leadership Forum. Separating the two would allow Master Leaders to make an informed choice about whether they actually want to lead forums and also give them time to reflect on their own experience as a Participant Leader, their technology vision, whether they really are a technology leader, etc. There are two ways to do this: one is to follow the Intel Teach to the Future Essentials Course and Workshop on Teaching Thinking with Technology Master Teacher/Participant Teacher model where Master Teachers go through a specialized training that models teaching techniques throughout; the second is to hold the Master Leader Training on a separate day from the forum to allow this reflection time.

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INTRODUCTION

This report presents findings from a formative evaluation of the Intel® Teach to the Future Leadership Forums, conducted by Education Development Center, Inc.'s Center for Children and Technology (EDC/CCT). These forums were created by Intel® Innovation in Education as a professional development experience for K-12 educational leaders to help these leaders promote and support technology integration in their schools and districts to improve teacher effectiveness and enhance student achievement.

Consistent with the long-term evaluation of the Intel® Teach to the Future program that Education Development Center's Center for Children and Technology (CCT) has been conducting since the program's inception in 2000, the Intel® Foundation commissioned CCT to conduct a formative evaluation of the Leadership Forum Pilot program.

This evaluation was designed to respond to the following questions:

- How have administrators who participated in the Fall/Winter 2004 forums built on that experience in their local communities?
- Do participants' responses to End-of-Forum Survey for the new (version 2.0), four-hour Leadership Forum curriculum vary significantly from participants' responses to forums using the original curriculum?
- How do participants respond to and follow-up on the Leadership Forums that follow the new, train-the-trainer format (i.e. Leadership Forum Model for Training Master Leaders).
 - Who is being selected to lead local trainings, who is participating in the program, and how are they being recruited?
 - How do Master Leaders respond to the training experience?
 - How do Master Leaders turn around their trainings in local schools or districts, and what obstacles do they encounter to doing so?
 - How do participant responses to the forum vary based on whether their forum is led by a Master Leader or a Senior Facilitator?

More specifically, the data collection efforts included the following research tasks:

- Describing participant responses to the Leadership Forums (those led by both Senior Facilitators and Master Leaders) and comparing responses across types of participants and types of trainers;
- Identifying the elements of support materials and training curricula that are supporting or impeding the effective delivery of core training concepts;
- Learning whether and how participants retain the key messages of the Leadership Forums and translate them into concrete actions or shifts in priorities and beliefs regarding educational technology;
- Learning whether and how Master Leaders go about recruiting for and leading Leadership Forum trainings in their school or district;
- Comparing follow-up to the forum experience for participants trained by Senior Facilitators to that of participants trained by Master Leaders.

This report draws upon data collected between February 11, 2005 and August 31, 2005 some of which were included in previous interim reports submitted to the Intel® Innovation in Education Team. Consistent with the structure of the Leadership Forums — it is built on a train-the-trainer model — this report is organized according to the various formats of the trainings:

- Section 1 presents findings from the Leadership Forums led by Senior Facilitators as well as a discussion of participants' follow-up plans and experiences related to forum curriculum and resources;
- Section 2 presents findings from the Master Leader Trainings;
- Section 3 presents findings from the Leadership Forums led by Master Leaders;
- Section 4 offers a broad overview of the Leadership Forum program, with some comparison of the various formats;
- Section 5 offers recommendations and considerations for moving forward.

Research Design, Methods and Data Sources

To gain an understanding of participants' experiences with the Leadership Forums —led by both Senior Facilitators ad Master Leaders — and Master Leader Trainings, and how participants might build on these experiences in their local communities, the research team employed multiple methods for acquiring data, including surveys, interviews and email correspondences, and observations at trainings.

<u>Surveys</u>

Two types of online surveys were employed for this evaluation: surveys that took place at the end of a training experience (i.e. End-of-Forum Survey and Response to Master Leader Training Survey), and a Follow-up Survey. The End-of-Forum Surveys were disaggregated according to who led the training (i.e. Senior Facilitators or Master Leaders) and include:

- Participant Leaders taking part in trainings led by Senior Facilitators;
- Participant Leaders taking part in trainings led by Master Leaders;
- Master Leaders taking part in trainings led by Senior Facilitators (reflecting a full day of training).

The purpose of these surveys was to gather participants' immediate response to the training and the trainer, as well as participants' plans to use the materials and resources provided during the training experience(s).

The Follow-up Survey (May 2005) was distributed online to all Participant Leaders who attended a forum between February 11 and May 20, 2005. The purpose of the survey was to gather data about participants' use of forum resources and knowledge gained from their training. The survey link was sent via email to 991 participants; 192 valid email responses were received from participants (a response rate of 19%) and 24 messaged were returned because the intended email address was not valid. Participant Leaders, who both responded to the Follow-up Survey and identified themselves as willing to be contacted about their experiences related to the Leadership Forums and action plans, were contacted for interviews.

Training Observations

Observations at Leadership Forums and Master Leader Trainings took place between February and August 2005. The purpose of these observations was to explore the different delivery methods of the forums (i.e. those led by Senior Facilitators and those led by Master Leaders) and participants' responses to these events. Particular attention was paid to who was attending the trainings and why; whether and how participants went about developing action plans focused on their local priorities; how participants planned to follow up with action plans; whether and how they engaged with the key concepts being explored in the forum; participants' reactions to the technological tools used during the forum and their descriptions of how these might or might not fit into their schools and/or districts. The research team also attended to variations in the focus and structure of trainings delivered by Master Leaders compared to Senior Facilitators, and how Master Leaders were localizing the content or focus of the forums. The number of observations conducted and the different training formats include:

- Four forums (using version 2.0 of the curriculum) led by Senior Facilitators for Participant Leaders (but not delivered in the train-the-trainer format);
- Four forums led by Senior Facilitators for both Master Leaders and Participant Leaders (including the additional Master Leader Training time);
- Two forums led by Master Leaders and delivered locally to Participant Leaders.

Phone interviews and email reflections

Thirteen phone interviews with Participant Leaders who had been trained by Senior Facilitators were conducted. These interviews explored the roles that technology integration plays in participants' local schools and districts and how the forums contributed to this process; participants' response to the forums and how they had (or had not) followed-up on the action

plans they began to create during the forum; and what were the responses they had received to their action plans locally.

In addition, five phone interviews and three email reflections with RTA Coordinators were also conducted in conjunction with their recruitment activities and interactions with their responsibilities associated with other the Intel® Teach to the Future professional development programs (i.e. Essentials Course and Workshop on Teaching Thinking with Technology).

SECTION 1: INTEL® TEACH TO THE FUTURE LEADERSHIP FORUMS - PROGRAM OVERVIEW

This section presents a general overview of (1) the Leadership Forums curriculum and learning goals; (2) the size of the program; and (3) a breakdown of participants' roles within their schools and/or districts.

(1) Leadership Forums Curriculum and Learning Goals

The aim of the Intel® Teach to the Future Leadership Forums is to provide K-12 educational leaders an opportunity to think about and explore resources and strategies to support effective technology integration in their schools and districts in order to improve teaching and learning. The Leadership Forums consist of one-time, four-hour, face-to-face training sessions where participants are asked to do the following:

- Examine the role that leaders play in the integration of technology into teaching and learning;
- Experience hands-on activities (e.g. using an electronic survey response system, online thinking tool, and online and CD-ROM resources) where they begin to apply and refine their knowledge and beliefs about leadership behaviors and technology integration;
- Explore the ISTE NETS-A (International Society for Technology in Education National Educational Technology Standards for Administrators); and
- Begin to create their own action plan to support technology integration in their schools and districts.

Each administrator attending the forums received a curriculum Participant Guide (version 2.0), along with a complimentary CD-ROM, which contained forum curriculum resources. Participant Leaders spent four hours engaged in a combination of hands-on activities and discussions within a computer lab setting. Using a PowerPoint presentation as well as print and web-based tools and resources, a trainer (or co-trainers) facilitated the forum curriculum, which consisted of six separate but related modules:

- 1. Introducing the Forum Introducing Yourself; Getting Started; Learning About the Forum Participants
- 2. Exploring Best Practices Viewing the Intel® Innovation in Education Web Site; Exploring Strategies and Exemplary Unit Plans
- Examining Leadership Behaviors and Standards Learning Through Ranking, Understanding Standards for Administrators; Revisiting Your Ranking (Optional), Learning from Real-World Practitioners
- 4. Constructing Your Personal Action Plan Discussing the Action Plan, Creating Your Action Plan
- 5. Touring Available Resources Using Resources Effectively, Exploring Resources
- 6. Wrapping Up Moving Ahead, Evaluating Your Forum Experience

In addition, the Participant Guide included an Appendix that contained information about the following:

- How to get involved in Intel® Teach to the Future programs
- Resources related to the Interactive Thinking Tools
- Case studies of real-world practitioners
- Action plan resources and examples

(2) Size of Leadership Forums Program²

Of the total population of participants involved in Leadership Forums during February 11, 2005 – August 31, 2005³ (N=1566), Participant Leaders trained by Senior Facilitators made up the largest portion (94%) (See Figure 1 and Table 1). Only 4% of the total participants were trained as Master Leaders, who in turn, trained 2% of the total number of participants.



	Senior Facilitator- Led Forums	Master Leader Trainings	Master Leader-Led Forums
Number of Forums	113	12	3
Number of Participants	1882	64	41
Number of States where	31	8	2
Forums Occurred			

² Numbers included here were obtained from EDC/CCT's Leadership Forum 2005 surveys including the Response to Master Leader Training Survey (N=58), Participant Leader End-of-Forum Survey led by Senior Facilitators (N=1471), and Participant Leader End-of-Forum Survey led by Master Leaders (N=37). Numbers of total participants involved in Leadership Forums (February 11, 2005 – August 31, 2005, using version 2.0 of the Leadership Forum curriculum) obtained from Intel® Innovation in Education/ Institute of Computer Technology (ICT) Team include: Participant Leaders led by Senior Facilitators (N=1882), Participant Leaders led by Master Leaders (N=41), and Master Leaders (N=64).

³ Version 2.0 of the Leadership Forum curriculum manual was implemented during this time.

⁴ These numbers were obtained from ICT and reflect total program numbers of Leadership Forum events and participants from February 11, 2005 – August 31, 2005 related to version 2.0 of the Leadership Forum curriculum manual and Edition 2.0 of the Master Leader Training curriculum resources.

(3) Positions of Leadership Forum Participants in Their Schools and Districts

The majority of participants across all formats of the Leadership Forums identified themselves as school principals (See Table 2 and Figure 2). Overall, participants involved in the Leadership Forums identified themselves as school-level principals (37%) and assistant principals (17%), followed by district-level technology directors, coordinators, or supervisors (10%), classroom teachers or other instructional staff (6%), district-level curriculum directors, coordinators, or supervisors (6%), school-level technology directors, coordinators, or supervisors (4%), district superintendents (3%), and school-level curriculum directors, coordinators, or supervisors (2%), and district assistant superintendents (2%). Fourteen percent identified themselves as having a position in their school or district other than those roles listed. Half of the Participant Leaders trained by Master Leaders were district-level technology directors, coordinators, or supervisors (21%) compared to Participants Leaders who were trained by Senior Facilitators (10%).

	Percentage of Leadership Forum Participants (Senior Facilitator–led) (n=1471)	Percentage of Master Leader Participants (n=58)	Percentage of Leadership Forum Participants (Master Leader– led) (n=37)
School Principal	37%	35%	39%
Other*	13%	26%	6%
District-level technology director, coordinator or supervisor	10%	21%	0%
School Assistant Principal	16%	9%	50%
District-level curriculum director, coordinator or supervisor	6%	7%	0%
Classroom teacher or other instructional staff	6%	3%	0%
School-level technology director, coordinator or supervisor	4%	0%	6%
School-level curriculum director, coordinator or supervisor	2%	0%	0%
District Superintendent	3%	0%	0%
District Assistant Superintendent	2%	0%	0%
School board member	0%	0%	0%

Table 2: Position of Master Leader Participants vs. Leadership Forum Participant Leaders
(Senior Facilitator-led and Master Leader-led)



Leadership Forum 2005 Data included here are from EDC/CCT's Response to Master Leader Training Survey (N=58), Participant Leader End-of-Forum Survey led by Senior Facilitators (N=1471), and Participant Leader End-of-Forum Survey led by Master Leaders (N=37).

SECTION 2: LEADERSHIP FORUMS LED BY SENIOR FACILITATORS

This section focuses on the delivery and reception of the Leadership Forums led by Senior Facilitators⁵ as well as short- and medium-term responses Participant Leaders⁶ had to the training. Specifically, it offers (1) an overview of findings from the End-of-Forum Survey that each participant was asked to complete, (2) a narrative discussion of participants' immediate responses to the workshop experience; (3) an overview of findings from a Follow-up Survey; and (4) a narrative discussion of participants' use of forum ideas and resources after the training.

Of the 113 Leadership Forums led by Senior Facilitators held between February 11, 2005, and August 31, 2005, the research team attended nine of these trainings. These trainings represented a range of district sizes, regions of the country and the number and types of school leaders in attendance (See Table 3 for an overview).⁷

Training	Region	Host District	Number of Participant Leaders
1	West	Large suburban district	17
2	Northeast	Small rural district	22
3	Northeast	Large urban district	6
4	Northeast	Large urban district	4
5*	South	Large urban district	17
6	Northeast	Private suburban district	19
7*	South	Small rural district	8
8*	Northeast	Large suburban district	17
9	Mid-west	Large urban district	11

Table 3: Senior Facilitator-led Leadership Forum Training Observations

(1) Overview of End-of-Training Survey

From February 11 to August 31, 2005, Intel® Innovation in Education held 113 Leadership Forums led by Senior Facilitators in 31 states. All Leadership Forum participants were asked to complete an online evaluation survey at the end of their four-hour training; 1,471 of the 1,882 participants submitted responses to this survey (a 78% response rate.).⁸ (See Appendix A.)

Leadership Forum Participants

- Most participants identified themselves as school principals (37%, n=543) or assistant principals (16%, n=236);
- Participants reported their experience in the field of education included working an average of 13 years as a teacher, 7 years as a school principal, and 7 years as a K-12 administrator (other than principal);

⁵ "Senior Facilitators" were trainers with previous experience as K-12 administrators (e.g. principal, assistant principal, superintendent) and were trained by the Intel® Innovation in Education/Institute of Computer Technology (ICT) Curriculum Teams to deliver Leadership Forums to Participant Leaders and Master Leaders throughout the United States. Senior Facilitators were trained as a group in February 2005.

⁶ "Participant Leaders" were educational leaders who attended a Leadership Forum that was conducted by either a Senior Facilitator or a Master Leader.

⁷ Those trainings that contain an asterisk (*) were sites that also held Master Leader Trainings.

⁸ Included in these responses are those of Participant Leaders that were referenced in the Q1 and Q2 Interim reports EDC/CCT submitted to Intel® Innovation in Education Team on March 29, 2005 and June 24, 2005.

- A majority of respondents reported their school or district was participating in Intel Teach to the Future or had done so in the past (62%; n=902);
- The greatest number of participants came from schools or districts in Texas (13%, n=185) and California (9%, n=125).

Profiles of Participants' Schools and Districts

- Close to a third of participants reported having approximately 1,000–4,999 students enrolled in their school or district (32%; n=465);
- Sixty percent reported having between 0–10 schools in their districts (with 47%; n=669 having 0–5 schools and 13%; n=182 having 6–10 schools), and 21% (n=181) having between 21–50 schools;
- Over half (54%; n=773) reported having between 0–50% of students in their district eligible for free or reduced price lunch;
- Sixty percent of participants identified two factors as having a "strong driving force" to
 integrating technology into instruction into their school or district: interests and priorities of
 other administrators in their school/district (n=873) and stated school/district goals for
 technology integration (n=862); half (50%, n=732) of the participants reported that the
 interests and priorities of teachers in their school/district are a strong driving force in the
 integration of technology into their school/district;
- Sixteen percent (n=238) identified scope and focus of budget allocations associated with technology integration as a "strong restraining force" to integrating technology into instruction in their school or district.

Participant Leaders' Responses to the Forum

- Participants had a strong positive overall response to the forums:
 - Ninety-six percent reported they would "definitely" (61%; n=860) or "probably" (35%; n=492) recommend this forum to a friend or colleague;
 - Ninety-seven percent said "definitely yes" (47%, n=682) or "probably yes" (50%, n=716) the ideas and skills they learned from the program will help them improve teacher effectiveness and student achievement by supporting and promoting the integration of technology;
 - While 69% (n=985) felt "enough time" was spent discussing best practices, a quarter felt that "not enough time was spent" engaging in these activities (25%; n=352).
- Participants' responses indicate the resources provided during the forum were useful to them:
 - Over half found the following activities to be "very useful" components of the forum: collaborating with other leaders and administrators (55%: n=790), reviewing the Intel® Teach to the Future Web site and online resources available there (54%; n=781), reviewing available resources on the CD-ROM (53%; n=765), and conducting a ranking activity (53%; n=771);
 - The largest group of participants felt they would be "very likely" to consult the resources provided on the CD-ROM handed out during the forum (61%; n=881).
- Ninety-two percent of participants reported the forum examined the critical role educational leaders play in effective integration of technology into teaching and learning to a "great extent" (45%, n=664) or a "moderate extent" (47%, n=688).
- More than half (54%, n=783) of the participants said that the program helped them create a prioritized list of leadership behaviors that impact the integration of technology as a tool to improve student learning to a "moderate extent."
- Half (50%, n=724) of the participants said the program helped them begin to develop a personalized action plan that will advance the integration of technology into their school/district to a "moderate extent."
- Of the participants, 47% (n=677) said the program illustrated concrete strategies that are new and will improve student achievement through the integration of technology into the classroom to a "moderate extent."
- Half (50%, n=724) of participants reported the program provided opportunities to engage in discussions and collaborate with other leaders and administrators to a "great extent."

Senior Facilitators' Effectiveness

- Sixty-nine percent (n=982) of participants said the facilitator was "very" responsive to questions about how to use the technologies focused on during the forum;
- When asked how skilled the facilitator was in helping forum participants develop ideas for their action plans, 58% (n=824) reported the facilitator was "very" skilled;
- Two-thirds (66%, n=937) of participants reported the facilitator was "very" effective at working with participants who were having trouble with portions of the curriculum;
- Sixty-four percent (n=898) of participants reported the facilitator was "very" skilled at facilitating group discussion and collaborative work;
- Sixty-eight percent (n=951) of participants reported the facilitator was "very" comfortable presenting the curriculum in an interesting and dynamic manner;
- Of the participants, 67% (n=937) reported the trainer overall, was "very" effective at facilitating their experience of the forum.

Participants' Preparedness to Use Forum Learning in their Schools/Districts

- The majority of participants felt "adequately prepared" to continue building on the following activities they began in the Leadership Forum:
 - Continue to expand and refine their personal action plan (73%; n=1052);
 - Implement the personal action plan they developed during the forum (68%; n=984)
 - Share the resources provided during the forum with other administrators and teachers in their school or district (69%; n=1000);
 - Encourage others in their school or district to explore professional development opportunities provided through Intel® Teach to the Future (72%; n=1027).

(2) Discussion of Participant Leaders' Response to Forum⁹

This section draws on administrators' responses to a survey they completed at the conclusion of their four-hour training collected between February and August 2005. Three themes are presented, (initially presented in the March 2005 EDC/CCT Interim Report) that are based on this cumulative survey data, observations at Leadership Forums during fall and summer 2005, and interviews with Participant Leaders, Senior Facilitators and RTA Coordinators.

(a) Participants came to the forums with a wide range of expectations, which were met to varying degrees by specific portions of the forum curricula.

In conversations with forum participants, it was clear that Participant Leaders were attending for a variety of reasons, and brought a variety of expectations into the experience. Two common expectations expressed by participants were a desire to learn more about concrete, practical ways to implement technology within their school or district, and a desire to devote a discrete period to reflecting on and refining their goals for technology implementation.

For example, one technology coordinator explained that practical concerns had motivated her attendance at the forum. She commented that she, "hope[d] to gain lots of practical ideas on the use of technology...my needs were met somewhat." Other Participant Leaders looking for concrete information had attended forums specifically to learn about Intel Teach to the Future programs. One school principal came specifically to learn about "next steps" after the Essentials Course. This principal, following exposure to the Essentials Course several years ago, now wanted to have a Master Teacher in her school: "Now that I'm two hours in, I'm finding [the pace of the forum] a bit slow," she remarked.

⁹ The research team originally presented this discussion in the March 2005 Interim Report to Intel® Innovation in Education Team.

Other Participant Leaders said they were attending forums to further develop their technology implementation plan, and to refine their vision of what technology integration means for their district. Some of these administrators reported that this forum was their first opportunity to devote professional development time to considering broader questions about how to use technology to support student achievement, rather than strictly discussing technology as a budget concern. One elementary school principal described the forum as, "a time for me to think about technology issues… In the course of a typical day in the life of a principal… there is not enough time to sit, think, and plan."

Both audiences felt that specific portions of the curriculum addressed their interests and priorities. But Senior Facilitators sometimes had difficulty blending these two distinct agendas into a seamless experience. For example, some participants were primarily interested in learning about how to involve their districts in Intel® Teach to the Future programs. Although the forums do share information about these programs, Senior Facilitators often made a significant effort to make clear to participants that their role (the facilitators') is not to market Intel® Teach to the Future programs. One joked with Participant Leaders, "I'm often introduced as the guy from Intel® and I'm not; I'm the guy from the public schools." RTA coordinators did indicate that they could serve as a future point of contact for participants interested in the programs, but the relationship between the facilitators' presentation and the RTA coordinators' role was not always clear.

(b) Action plan development was loosely guided, and participants took widely differing approaches to the task.

The action planning process is introduced in Module 4.0, and asks participants to fill in at least three boxes of the action plan template. In the curriculum, this activity is presented as a focal point of the forum, and the draft action plan is promoted as the key product that participants will take home with them. However, participants spend a relatively small amount of time developing these plans and facilitators introduce the activity with little structure or guidance and do not always encourage follow-up conversation. Facilitators also do not typically draw on previous activities, such as the *Visual Ranking* of the NETS-A standards and the discussion of administrators' own comfort with technology, to inform participants' drafting of these plans.

Unsurprisingly, then, participants' action plans seem to vary widely in their focus and content, and participants vary widely in the amount of attention they give to the task of beginning to draft a plan. Generally, it seems that action plans created by Participant Leaders either emphasize very concrete strategies for advancing technology implementation and usage, or present broadly stated goals for promoting a vision of technology use in participants' schools or districts.

Forum observations suggest that Participant Leaders who come to the forum looking for concrete resources and ideas were more likely to begin action plans that list concrete ways to achieve their goals. For example, one technology coordinator explained that her action plan included a short-term goal of using the *Visual Ranking Tool* to survey faculty about their priorities for using technology in their teaching. As a mid-range goal, she plans to arrange the year's last professional development seminar around her findings. She expects that other high-ranking requests will inform her long-range goals and receive attention in next year's professional development offerings (she also reported that she has done this survey and that faculty responded positively to the exercise).

Many other administrators' action plans were limited to broad statements such as "Continue to support integration of technology in school and promote co-planning to further advance delivery of curriculum," and "Recognize successful technological teaching and learning and encourage teachers to share with colleagues" (both short-term goals). The administrator who drafted these goals (a school principal) did not include any description of how he might specifically go about accomplishing these things. It is important to note that in this particular example, this principal was enthusiastic about using the forum as an opportunity to think carefully about how to improve

his school's technology plan. However, the content of his action plan suggests that either he was not prepared, or the forum did not stimulate him, to begin translating his broad statements into proposed concrete actions.

(c) Turning Point and Visual Ranking exercises, both intended to model technology use in an instructional setting, play very different roles in the Forum experience.

During these forums, methods of using technology to support student achievement are highlighted through the use of technological tools such as the Turning Point software and the *Visual Ranking Tool*. Both of these tools are used to facilitate discussions about participants' knowledge of various technologies, technical concerns such as hardware and software issues, and visions for technology implementation. Data collected to date suggest that Turning Point is not always effective in focusing administrators on substantive discussions related to key Forum topics, while *Visual Ranking* is highly effective in this role.

Using Turning Point to examine Participant Leaders' comfort with technology. As part of the forum curriculum, Senior Facilitators use Turning Point to gather Participant Leaders' responses to questions and quickly summarize and share this data with all participants. In forums observed to date, Turning Point-mediated conversations were sometimes lively, but they tended to focus on Turning Point itself. Administrators were often curious about whether and how they could purchase the system, and were interested in brainstorming ways they could use it in their own work. In some cases these conversations shifted toward broader discussions of presentation tools (both software and hardware systems), their expense, and their relative usefulness in different professional development and classroom settings. In our observations, Senior Facilitators had difficulty engaging administrators with any discussion of the *instructional* value of such systems. Additionally, as noted in our report on the pilot forums (December, 2004), Turning Point sometimes malfunctions during forums, causing considerable disruption.

Using the Visual Ranking Tool to consider participants' goals for technology integration. When responding to a Turning Point assessment during the forum, Participant Leaders tended to select the Visual Ranking activity as the most helpful exercise of the day, compared to the NETS-A Visual Organizer or "talking and thinking together." Further, 56% (n=117) of the Participant Leaders reported on the survey that they found the ranking activity to be "very useful." Participants reported in conversations that they found the tool simple to use and felt that the comparison function, which allows them to compare their own ranking of the NETS-A standards with those of their fellow Participant Leaders, to be an engaging way to learn about their colleagues' beliefs.

In a variation on this activity, some Senior Facilitators asked Participant Leaders to rank the NETS-A individually, rather than in small groups. Individual Participants Leaders then used the correlation tool to compare their responses with those of other administrators. Several Senior Facilitators expressed the view that differences in responses tended to be based on the different positions administrators held and their varying perspectives and responsibilities. This activity generated a great deal of excitement and discussion, both about the tool itself and about the content of the exercise. As they did with Turning Point, Participant Leaders identified ways that they wanted to use *Visual Ranking* in their own staff meetings and classrooms. Many wanted to learn how to create their own ranking exercises in order to canvas opinions or generate discussions on a topic.

The Visual Ranking exercise often led participants into broader conversations about their local goals for technology integration. One Senior Facilitator commented that school-level and district-level administrators tend to order their Visual Ranking lists differently, with district people often ranking vision-related statements at the top and school-level people focusing more on concrete actions and less on vision. As this specific observation suggests, this activity seems to succeed in engaging administrators in explicit examinations of their own goals, both visionary and concrete,

and in making visible the different perspectives individual administrators bring to the project of improving instructional applications of technology within their districts.

(3) Participant Leaders' Responses to the Follow-up Survey

An electronic Follow-up Survey to all Participant Leaders who attended a forum between February 11 and May 20, 2005 was distributed. The purpose of the survey was to gather data about participants' use of forum resources and knowledge gained from their training. The survey was sent via email to 991 participants; 192 valid email responses from participants (a response rate of 19%) were received and 24 messaged were returned because the intended email address was not valid. (See Appendix B.)

Leadership Forum Participants

- The largest group identified themselves as school principals (26%; n=50);
- Close to a quarter (23%; n=30) had been trained as either a Participant or Master Teacher on the Intel® Teach to the Future Essentials Course, with the majority of participants responding they had not attended either an Intel® Teach to the Future Essentials Course (74%; n=99) or a Workshop on Interactive Thinking Tools (76%; n=99);
- The largest group had attended a Leadership Forum during April 2005 (35%; n=66).

Resources Participants Had Consulted Since Attending a Forum

- Over half had consulted the Leadership Forum Participant Guide (58%; n=110);
- Sixty-eight percent (n=125) had not yet consulted the research reports on the forum CD-ROM, but plan to do so;
- Less than a quarter (20%; n=38) responded they do not plan to consult either the contact information or resources suggested by peers at the forum (21%; n=38), or local contacts present at the forum (e.g. RTA Coordinator, trainer, or LEAs) (21%; n=38).

Activities Participants Had Done Since Attending a Forum

- The majority of respondents indicated they had done the following activities in their school or district:
 - Shared resources from the forum with other administrators or other teachers (86%; n=164);
 - Encouraged others to explore professional development opportunities provided through Intel® Teach to the Future (71%; n=136);
 - Supported other teachers or administrators with concrete strategies for technology implementation (64%; n= 123);
 - Expanded or refined their personal action plan (51%; n=98).
- Over half of respondents indicated they had not implemented elements of their personal action plan (57%; n=107).

Factors that Influenced Participants' Decision to Act on their Personal Action Plan

- Forty-three percent of respondents (n=82) implemented elements of their personal action plan;
- Over three-quarters of these respondents felt the following factors were a "strong influence" on their decision to implement elements of their personal action plan:
 - Their ability to engage with others in their school or district about the importance of implementing technology in the classroom (84%; n=69);
 - The technology resources (equipment in labs, classrooms, mobile carts, etc.) available in their school or district (80%; n=66);
 - Interests and priorities of teachers in their school or district (75%; n=62).
- A third (33%; n= 27) felt interests and priorities of other administrators in their school or district was a "weak influence" on their decision to implement elements of their action plan;

- Fifty-seven percent of respondents (n=107) did not implement elements of their personal action plan;
- Sixty percent (n=66) of these respondents indicated the amount of time in their schedule to work toward technology implementation in their school or district was a "strong influence" on their decision to not implement elements of their action plan;
- Approximately one-fourth responded the following factors were a "weak influence" on their decision to not implement elements of their action plan:
 - Stated school/district goals for technology integration (26%; n=28);
 - Amount of technical support available in their school or district (23%; n=25).

(4) Discussion of Participant Leaders' Use of Ideas and Resources

In addition to distributing a follow-up survey to all Participant Leaders, researchers interviewed 13 participants in Summer 2005. These participants held a range of positions (e.g., principals, assistant principals, professional development specialist, and classroom teacher/curriculum developer) and responded to questions about how they had used the Leadership Forum curriculum, resources and their personal action plans since attending a training. Below is a discussion of the themes that emerged from these interviews.

(a) The Leadership Forums remained a sturdy bridge to the professional development programs Intel® Teach to the Future offers teachers and administrators, though scheduling participation in these programs was proving difficult for some.

Several administrators said they had a sustained interest in pursuing professional development opportunities for classroom teachers within their schools and districts and had either sought out an Intel-sponsored program following their forum participation or planned to do so in the near future. A majority of participants said they already were familiar with the Intel Teach to the Future Essentials Course and Workshops on Teaching Thinking with Technology and wanted more of their teachers to benefit from the experience of participating in these face-to-face trainings. One assistant principal acknowledged, however, that the desire to learn about using technology was not shared among all teachers in her building. By way of example she said she had sent an email message to her staff about the information she had received at the forum but it did not generate a response. When she targeted specific teachers who were "tech savvy," she was able to encourage a teacher to attend an Intel course over the summer. Other participants said they were not sure if they would encounter similar logistical and attitudinal barriers but wanted to pursue Intel-sponsored professional development opportunities for their teachers.

In addition to professional development among teachers, several Participant Leaders said they wanted more administrators within their schools and districts to participate in a Leadership Forum. Having the same training experience would create "buy in," as one participant described, and would give them a shared understanding of what "good technology use in a classroom situation looks like." Similarly, it would help them better support the practitioners in their buildings. As on assistant principal explained, "For what the forum did, it got you thinking what was out there for teachers. Because as an administrator, we tend to lose touch with the classroom piece." Another said, "There are so many resources related to technology for teachers that f I were back in the classroom I'd go nuts! There's so much. If it comes from us, it makes it a priority." Finding a way to train additional administrators that is both practical and appealing was considered by one participant to be no small undertaking. She said, "It's not just about getting teachers involved. It needs to be a priority for the team, which is challenging. It's also about changing my colleagues - [she laughs] — and they're my equals. I'm not their boss." Although the circumstances are slightly different, another participant expressed a similar sentiment: "We have 20 principals changing positions this year. This is an unusually high number and it is hard to get them to commit to programs, etc. when they have one foot in each camp."

(b) The generally positive view Participant Leaders had of the Leadership Forums upon completing the training had not changed with time although, in general, their actual use of the resources and action plans had not materialized as they had anticipated.

Overall, according to the Follow-up Survey of Participant Leaders' activities since attending a Leadership Forum. 86% said they had shared resources from the forum with other administrators or teachers in their school or district, and encouraged others locally to explore professional development opportunities provided through Intel® Teach to the Future (71%) (See Figure 3). Fewer than half (43%) of the participants responded they had implemented elements of their personal action plan in their school or district. Multiple Participant Leaders commented that while they had not had time to revisit all of the resources they obtained during the forum, they had shared some of the resources with others in their school or district. For example, one assistant superintendent remarked that she thought her district was planning to send some of their teachers to an Essentials Course, but the principals in the district were making the final decision and will most likely have the teachers trained as trainers. In fact, most of the participants said they had enjoyed sharing ideas and strategies with other leaders and found the "networking" aspect of the forum, as well as the general focus of the resources, to be very useful. As one participant said, "I continue to find the Intel trainings among the most worthwhile available. They fit in perfectly with our focus on the LoTi (Levels of Technology Implementation)." One professional development specialist who worked outside of the school system commented many of the forum participants shared ideas and strategies they had used to model technology use for their teachers. For example, she said she liked hearing a colleague describe how beneficial it had been to replace memos with emails. Likewise, an elementary school principal explained how he modeled this activity for his teachers, sending "Monday Memos" on email to both communicate his activities and gets his teachers in the habit of checking their email. He said teachers told him that once they started reading these they "finally knew what their principal was doing." Similarly, in responding to whether the Leadership Forum met her expectations, another Participant Leader who described herself as a Director of Libraries and Academic Technology, and who was trained as a Master Teacher on both the Essentials Course and the Workshop on Teaching Thinking with Technology said, the forum more than met her expectations. She explained that in a local technology retreat, she and the technology director at the school "pulled some things they'd heard at the forum, such as planning." After she left the technology retreat, she realized a lot of what had happened at the forum was helpful and relevant, explaining "I have used things; I didn't expect to." She felt that the forum was appropriate for administrators, but she did draw materials from the forum as someone who is concerned about technology integration among practitioners. She said both she and the technology director had used the resources from the forum, which they found were a "great source of ideas."

Many participants also said the action plan template was useful for organizing their thinking during the forum but they had not returned to it since leaving the training. For example, a curriculum technology integration specialist stressed the importance of the action plan and the opportunity to become familiar with NETS-A, which she said many administrators in her forum had not seen before their training experience. She explained that the forum, "gave them time and a framework to come up with an action plan." Another participant said, "I appreciated that I got to go, and it got me back in the mindset of being an instructional leader, not just management." Once these instructional leaders returned to their offices and the ongoing demands of their leadership positions, however, many said they had not formally retuned to their action plan but hoped to do so in the near future. As one participant explained, "I haven't had a great deal of time to use the material yet. I am very impressed so far and I plan on implementing the material in a system-wide approach." Doing so may be difficult, according to others, as several Participant Leaders said they felt they had very limited time to revisit the resources given other priorities.

Figure 3



EDC/CCT Participant Leader – Follow-up Survey for the Leadership Forums 2005 (N=192). All of the respondents were trained by Senior Facilitators.

(c) Because there was general consensus among educational leaders drawn to the forums about the importance it places on meaningful technology integration at the classroom level, several Participant Leaders said they welcomed additional opportunities to develop their skills and action plans.

Several participants said they recognized the value of structured follow-up and proposed suggestions Intel Innovation in Education could adopt to help them continue their learning. They suggested follow-up email messages, which would contain brief prompts or links to original modules, as well as additional face-to-face training sessions. As one elementary school principal said, "There is only so much you can do in four hours." Another said, "The training needs to be longer, with more time to explore, discuss and collaborate. Designing a lesson as an exercise would be useful." And yet another explained, "We need Intel Teach to the Future for Administrators — how to use technology to improve our craft, teaching teachers." Consistent with this desire for subsequent training, a few participants said the follow-up interview with CCT staff, and the email correspondence that preceded it, served as a helpful reminder to administrators to think back on what they had done in the forum and to revisit both the resources and their personal action plan.

SECTION 3: MASTER LEADER TRAININGS

During the spring and summer of 2005, Intel® Innovation in Education rolled out its train-thetrainer iteration of its Leadership Forum program, targeting "Master Leaders." "Master Leaders" were K-12 educational leaders who had been identified by their Local Education Agency (LEA) to (1) attend the Leadership Forum as Participant Leaders, as described in Section 1, (2) attend an additional training component beyond the Leadership Forum (i.e. a Master Leader Training), and (3) commit to turn around the Leadership Forum training to 10 other educational leaders in their local schools and districts, using the same curriculum and resources learned and acquired during the Leadership Forum, by December 1, 2005.

This section contains two parts: (1) an overview of Master Leaders and their responses to the training they received, and (2) a narrative of Master Leaders' responses to the training.

Twelve Master Leader Trainings were held between April and August 2005. Trainings were held nationally, with the greatest number taking place in California. The research team attended four trainings that represented a range of district sizes, regions of the country and number and types of school leaders in attendance. See Table 4 for an overview of these trainings.

Tuslada					
Training	Number of	Region	Host	School/	Number of
	Master		District	District Position	participating
	Leaders				districts
1	1	Northeast	Large	1 District-level	1
			suburban	Supervisor of	
			district	Instructional Technology	
2*	14	South	Large	14 Principals	1
			urban		
			district		
3*	2	South	Small rural	1 Regional Technology	1
			district	Coordinator;	
				1 CIO/DTC Chief	
				Information	
				Office/District	
				Technology Coordinator	
4*	3	Northeast	Large	1 District Coordinator;	2
			suburban	1 District Technology	
			district	Teacher;	
				1 Coordinator of	
				Distance Learning	

* = Indicates the research team attended both this Master Leader Training and the Leadership Forum led by the Senior Facilitator.

(1) Overview of Master Leaders' Responses to the Master Leader Training Survey

Between April and August, 2005, Intel® Innovation in Education held 12 Master Leader Trainings in conjunction with Leadership Forums led by Senior Facilitators in eight states. All Master Leaders were asked to complete an online evaluation survey at the end of their four-hour training; 58 of the 64 participants submitted responses to this survey (a 91% response rate). (See Appendix C.)

Master Leader Training Participants

- Most identified themselves as school principals (35%, n=20), or district-level technology directors, coordinators or supervisors (21%, n=12); close to a quarter (26%; n=15) identified themselves as "Other," including positions such as county coordinators and support-project specialists, regional coordinators, teachers on special assignment to the district, and a vocational director;
- The greatest number of participants came from schools or districts in California (38%, n=22), Florida (19%, n=11), and Arizona (17%; n=10);
- Eighty-three percent of participants (n=48) were motivated to a "strong extent" to become a Master Leader because the training was recommended to them by someone in their school or district;
- Over half of participants reported they were motivated to a "strong extent" (57%; n=33) to become a Master Leader because teachers in their school or district were involved in the Intel® Teach to the Future program; twelve percent said it motivated them to a "small extent" (n=7) and 2% (n=1) said it motivated them to "no extent".

Master Leaders' Responses to Trainings

Most participants responded positively to the overall training:

- Eighty-one percent (n=47) indicated they would recommend this training to a friend or colleague and 14% (n=8) would recommend the training, but felt their district was not able to support any additional Master Leaders at this time;
- Close to 90% of participants "agreed" or "strongly agreed" with the following statements about the training overall:
 - The training agenda was closely followed (97%; n=56);
 - The goals and objectives were clearly stated (95%; n=55);
 - The directions were clear for each of the activities (93%; n=54); and
 - Participants were engaged in group discussions on the topics presented (89%; n=52).
- Most participants had favorable responses to the trainer; approximately 80% of the participants reported the Senior Facilitator was "very":
 - Responsive to questions they or their peers had about how to use the technologies focused on during the training (88%; n=51);
 - Successful at guiding them through the overall scope and sequence of the forum curriculum (85%; n=49);
 - Effective overall at facilitating their experience of this training (81%; n=46);
 - Prepared at presenting the materials (80%; n=45);
 - Effective at working with them or their peers who were having trouble with portions of the forum curriculum (77%; n=44);
 - Effective overall at preparing them to lead a forum (74%; n=43);
 - Skillful at helping them develop or improve their facilitation skills (66%; n=38).
- Over half of participants indicated they were planning to lead a forum next school year before December 1, 2005 (53%; n=31). Nineteen percent (n=11) planned to hold a forum this school year, more than two weeks from the time they took the Master Leader Training, 17% (n=10) indicated they planned to hold a forum this school year, within two weeks of the Master Leader session, 7% (n=4) planned to conduct forums this school year but more than two weeks after their training, and 3% (n=2) reported they do not plan to lead a forum;
- Over 80% of participants reported the following Master Leader Training resources "very useful" to them as they prepared to lead their own Leadership Forum locally:
 - Forum Curriculum Resources CD-ROM (88%; n=51);
 - Master Leader Appendix found in the forum manual (84%; n=48);
 - The experience of going through the Intel® Teach to the Future Leadership Forum as a participant (84%; n=47);
 - The facilitator presentation slides (83%; n=48);
 - Master Leader Checklist (81%; n=47).

- Close to a third of participants found the following Master Leader Training resources to be "somewhat useful" and "moderately useful" to them as they prepared to lead their own Leadership Forum locally:
 - Master Teacher Performance Rubric (5%; n= 3 "somewhat useful" and 24%; n= 14 "moderately useful");
 - Master Teacher facilitator notes in the margins of the Intel® Teach to the Future Leadership Forum manual (2%; n= 1 "somewhat useful" and "moderately useful" 29%; n= 17).

How Prepared Master Leaders Felt to Present or Facilitate the Leadership Forum

- Most participants reported an adequate to high degree of preparedness to conduct a Leadership Forum; over half of the participants reported feeling "very prepared" to present or facilitate the following components of the forum:
 - Encouraging collaboration among participants (67%; n=39);
 - Reviewing the resources available on CD-ROM (60%; n=34);
 - Recruiting other participants to attend a forum in their school or district (54%, n=31);
 - Reviewing the Intel® Innovation in Education Web site and online resources (53%; n=31);
 - Conducting and revisiting the ranking activity (50%, n=29).
- Close to a quarter (22%; n=13) felt "somewhat prepared" to present or facilitate the exploration of NETS-A standards for educational leaders in their school or district;
- Generally, over one half of participants reported they felt "very prepared" to set up or facilitate various technical components of the forum: CD-ROM resources (64%, n=37); the forum presentation slides (60%, n=35); the *Visual Ranking Tool* activity (55%, n=32); and the Intel® Innovation in Education Web site and online resources (52%, n=30).

(2) Discussion of Master Leaders' Response to Training¹⁰

This section draws on the data collected during the pilot phase of implementation of the Master Leader Program. Three themes emerged from observations, administrators' responses to a survey they completed at the conclusion of their four-hour training as well as interviews with participants, Senior Facilitators and RTA Coordinators, which are presented below.

(a) Administrators seek out Master Leader Training based on Intel's solid reputation as a provider of high-quality educational resources and professional development in their schools and districts.

In general, administrators reported they participated in the Master Leader Training based either on an existing relationship with Intel, a desire to obtain high quality resources relevant to technology integration efforts or a combination of the two. Having established strong relationships within districts throughout the country, many RTA Coordinators reported their principal strategy for recruiting potential participants for Master Leader Trainings was to pull from regions where Intel had an established presence. This approach proved successful: nearly all of the Q2 trainings were held in districts where Intel® Teach to the Future programs were presently in place or had been in the past, and 93% of survey respondents (n=54) reported their teachers' involvement in Intel Teach to the Future programs was to some extent an influence in their becoming a Master Leader. Fifty-seven percent (n=33) said it was a strong influence.

While a large majority of participants were aware of Intel's general reputation as a source of educational resources, about one-fourth said their commitment to become a trainer themselves grew out of first-hand experiences with the other Innovation in Education programs: five of the 41 Master Leader candidates trained as of May 2005 previously had been trained as Master Teachers, at least two were their district's LEA and three had attended Leadership Forums prior

¹⁰The research team originally presented this discussion in the June 2005 Interim Report to Intel® Innovation in Education Team.

to the day they received their Master Leader Training. This last group said their multiple observations had familiarized them with the format and substance of the forum and left them well poised to receive the Master Leader Training. Additionally, in several instances, the pre-existing relationships between Intel and participants' districts influenced administrators' high expectations of the training — expectations that they said were met. For example, during the portion of the training that asks participants to evaluate their own facilitation skills using the Self-Evaluation Rubric, two administrators shared stories related to their Intel Teach to the Future Essentials Course trainings. They said how impressed they were with the consistent quality and organization of Intel's professional development materials, spoke about how they recruited for the program, and asked whether the scheduling procedures would include "Intel goodies."

As for the second compelling reason for participating — the high quality resources — many administrators said the materials were the initial draw of the Master Leader program and the training component they valued most. Eighty-eight percent of survey respondents (n=48) reported the Forum Curriculum Resources CD-ROM would be "very useful" to them as future trainers, 9% (n=5) reported it to be "moderately" useful and 3% (n=2) said they had no opinion. As one participant summarized, "[The] resources are wonderful! Because they will support me as I venture out to conduct my own trainings."

Although many participants said they were satisfied with the materials they received to help them conduct trainings with peers, particularly the curriculum guide with facilitator tips, PowerPoint slides, and files on the CD-ROM, their satisfaction was based on how well these resources would help them lead a training rather than what they intended to accomplish during those trainings. Their immediate concern was that they acquire the concrete skills and know-how to conduct Leadership Forums and on this level they said the resources would be useful. They had not had sufficient time, however, to think about the depth of the resources and how they could use them to generate specific conversations related to technology integration and how they could use the Leadership Forum resources to address local needs. Many of them indicated they would do that level of thinking after they had a basic grasp of the print and electronic materials they had received. One participant who had taken the Essentials Course as a Master Teacher and therefore who had had greater time to explore those materials said the CD-ROM was "like gold" and anticipated the Master Leader Training CD-ROM would be similarly valuable once she got to know it as thoroughly.

(b) To make the Leadership Forums relevant to local needs, administrators reported they preferred to adapt aspects of the training, such as scheduling procedures and curricular activities, rather than strictly adhere to the turn-key model.

Over two-thirds of participants (68%: n=39) said the Leadership Forum curriculum aligned with their school or district's technology plan. However, there were aspects of the forum curriculum and the format for conducting localized forums that may not align with participants' needs and therefore their plans for conducting their own Leadership Forums. Administrators posed many questions during the four-hour sessions that revolved around potential or desired adaptations. Their questions ranged from the general to the specific, all of which the facilitator sought to address. For example some participants reported they were assigned to special projects that focus on providing technology training in their districts. They said they viewed the Master Leader Training as an opportunity to add skills and tools to their existing bank of knowledge and would use resources like Visual Ranking to initiate a conversation about standards and the research reports available on the CD-ROM to provide background information to various staff members. These participants said they would like to incorporate elements of the Leadership Forum into their existing practices, or use the forum's framework to promote a variety of professional development opportunities, not exclusively those embodied in the forum. They often did not specify what form these other professional development opportunities would take, instead, they wanted to know if they had Intel's permission to use them as they saw fit or were restricted to using them solely in the context of a Leadership Forum.

Other participants said they would like to alter the delivery of the forum as well as the resources intended to aid technology integration within their schools and districts and specified why they had a need to alter the Leadership Forum model. The adaptations they predicted they would make — or would like to make should they have Intel's approval and/or cooperation as some administrators were more tentative about making changes — tended to fall into two categories: scheduling and recruitment, and curriculum.

Scheduling and Recruitment. Administrators described a number of ways they intended to alter the structure of their Leadership Forum, many of which were tied to their planned recruitment efforts. For example, several administrators asked questions or made comments during the training about the need for a shorter timeline for scheduling forums and obtaining materials. As one Master Leader commented, "It would be helpful if the manuals were in a .pdf format so I could provide copies to participants in short-notice training events. Sometimes in school districts, it is not possible to plan training events eight weeks in advance." Similarly, another participant said, "We need a shorter timeline, especially if we're targeting superintendents and principals." A number of other administrators were focused on the length of the forum itself rather than the deadline by which administrators had to commit to participating. Many said they thought it would be difficult to get 10 busy administrators all to commit to attending a half-day session on the same day. Because of this, one administrator, for example, inquired about breaking the four-hour forum into two sessions to be offered over two days rather than one because she knew her "people wouldn't be able to focus for a straight four hours." Conversely, another administrator said she would prefer to hold a six-hour Leadership Forum for administrators in her district because it would give them ample time to complete their action plans rather than simply begin them. She said she found this element of the forum to be the one most suited to meet her district's needs and did not want to be constrained by the four-hour running time.

Curriculum. In addition to lead time and the length of the forum, several administrators focused on the Leadership Forum curriculum and said they viewed it as somewhat malleable. They said they assumed Master Leaders could present the content and plan forums according to their discretion provided they stayed within the basic Leadership Forum structure they had been provided. They said it was their responsibility to shape it to fit their local context and district priorities for technology integration and use of Visual Ranking often was where they saw the greatest potential for adaptability. For example, although many administrators thought it was worthwhile to discuss standards they said other topics may be more relevant to the administrators they envisioned training. They did not state what other topics they might pursue; instead they focused on what was technically required to input new content in the tool. Other administrators discussed how they might provide a replacement for the "Introducing Yourself" activity in the first module as they would be training a group of people who already knew one other. They decided, "We can probably do whatever we want" during the time typically set aside for introductions. Surprisingly. several Master Leaders candidates who were trained as Master Teachers indicated they wished to alter the substance of the forum or the turn-around window although Essentials Courses and Workshops did not give them this level of flexibility with the curriculum.

(c) Although administrators generally reported they felt prepared to offer their own Leadership Forum, many participants expressed uncertainty about what was expected of them and how well equipped they were to serve as an official Master Leader.

The majority of administrators generally expressed satisfaction with the Master Leader resources supplied to help them turn around the forum. They reported they especially valued the ready-touse format of the Master Leader resources, such as the PowerPoint scripts, as well as the stepby-step activity outlines, and said participation in the Leadership Forum prior to the Master Leader Training had helped them become familiar with the basic concepts and tools. Approximately half of the Master Leaders Participants said they felt "very prepared" to present or facilitate the major components of the Leadership Forum and to handle the technical components. A significant minority of the Master Leaders trained as of May 2005, however, said they were not ready to conduct a forum and would need additional time working with the resources and technical tools to be sufficiently prepared to train their peers. These administrators identified four areas where they wanted further practice, clarification and/or support: basic training requirement, technical skills, recruitment and local support.

Basic Training Requirement. Some administrators said they were not aware they were expected to train 10 Participant Leaders by December 1, 2005, while others were. Typically those who were familiar with the Intel® train-the-trainer model through Essentials Courses or Workshops understood the Leadership Forums would function in a similar manner. They said they understood the expectation to train 10 people in a manner that preserved the integrity of Intel's Leadership Forum curriculum as analogous to a Master Teacher's commitment to train 10 Participant Teachers using the curriculum and training methods provided.

Whether administrators were aware of the basic requirement prior to the Master Leader Training or not, many of them were uncertain when they would conduct a local Leadership Forum. They often said they had no immediate plan but would need time to determine how the professional development could complement their existing strategies to support technology integration.

Technical Skills. About one-third of Master Leaders trained as of May 2005 said they needed more hands-on training before they would be able to lead trainings on their own. Because of the anxiety associated with this feeling of being unprepared, however, the topic of technical skills was a common one during many Master Leader Trainings. For example, several participants asked how to set up and use Turning Point and the PowerPoint slides associated with gathering participants' responses while others said they had not mastered how to move back and forth between PowerPoint slides, the CD-ROM and the Internet, or how to set up *Visual Ranking*. In these instances participants often said they needed more time devoted to learning how to use the technical tools before they could focus on the substantive goals. For example, one administrator said she did not feel comfortable leading a training by herself because she was fearful of facing her peers with her current level of knowledge. She concluded that if she did not feel comfortable after additional practicing she would bring her technical support person with her to do the training.

Recruitment. An additional concern for many administrators was ensuring adequate representation at the training sessions they would lead. During the Master Leader Trainings participants regularly focused on recruitment and brainstormed about whom to recruit and what strategies would be most effective. Administrators often were not clear who was responsible for recruitment, and, if they were, if support would be available. Similarly, many administrators asked if they were required to train all 10 administrators at once — some preferred breaking the group into smaller sessions — and others asked if they were limited to training people in their district — they thought they might need to reach out to neighboring districts in order to reach the 10-administrator quota. Another procedural concern that arose had to do with how the Master Leaders could access the Leadership Forum rosters themselves rather than having to follow up with an RTA or Intel/ICT representative. They said they would have greater success if they could use this information to correspond independently with potential participants.

Local Support. While support structures, such as Intel® Customer Support and Turning Technologies online support, were built into the trainings, participants expressed concerns about needing additional support at the local level in order to feel comfortable conducting their own Leadership Forums. For example, in a district where only one Turning Point kit was available participants said they were worried about having access and time to practice with the one set before having to lead their own training. A district person had been selected to be the local "expert," coordinating this extra training effort and providing support to Master Leaders who felt they needed to gain a greater sense of comfort with the technology before conducting trainings for their colleagues. In another training, the participants decided it would be helpful to have someone to whom they could turn to pose questions about recruitment strategies and other topics as they arose. This group of administrators decided they would be each other's support system and exchanged email addresses at the end of the training. In yet another training the Senior Facilitator suggested that building support groups was especially important in large school districts and encouraged participants to identify people able to offer help.

SECTION 4: LEADERSHIP FORUMS LED BY MASTER LEADERS

In Summer 2005, Master Leaders began offering Intel® Teach to the Future Leadership Forums within their local districts. This section focuses on those trainings and contains two parts: (1) an overview of Participant Leaders and their responses to the training they received, and (2) a narrative discussion of the roll-out of the train-the-trainer model.

The research team observed two of the three trainings that took place, an overview of which is included in Table 5.

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Training	Number of	Region	Host District	Master Leader's
	Participant Leaders			Position
1	15	Northeast	Large Urban School	Middle School
			District	Principal
2	10	West	Large Urban School	District Professional
			District	Development
				Coordinator

 Table 5: Master Leader-led Leadership Forum Training Observations

(1) Overview of End-of-Training Survey

Thirty-seven of 41 participating administrators responded to an online survey administered at the end of each four-hour training (a 90% response rate). (See Appendix D.)

Master Leader-Led Forum Participants

- Most identified themselves as school-level administrators, with school assistant principals (50%; n=18) and school principals (39%, n=14) the most common. Two respondents identified themselves as school-level technology directors, coordinators, or supervisors (6%), and two (6%) chose the "Other" category;
- The greatest number of participants came from schools or districts in California (61%; n=22) and New York (36%; n=13); one participant came from Connecticut (3%);
- Two fifths of participants reported their school or district had participated in the Intel® Teach to the Future program (42%; n=15), and an almost equal number (39%; n=14) were unsure. About one fifth said their school or district had not participated (19%; n=7);
- Participants reported their experience in the field of education included working an average of 12 years as a teacher, 3 years as a school principal, and 4 years as a K-12 administrator (other than principal).

Profiles of Participants' Schools and Districts

- Close to a third of participants reported having approximately 10,000 or more students enrolled in their school or district (30%; n=10);
- The largest groups of participants reported having between 11–20 schools in their districts (37%; n=13), and 31% (n=11) reported having more than 100 schools in their districts. Seventeen percent (n=6) reported having between 6–10 schools in their districts;
- Close to 70% reported having over 50% of students in their district eligible for free or reduced price lunch, (31% (n=11) between 51–75%, and 40% (n=14) between 76– 100%);
- Close to 70% of participants reported the interests and priorities of other administrators in their school/district are a "strong driving force" in the integration of technology into their school/district (69%; n=25);
- Almost a quarter identified the following factors as a "strong restraining force" to integrating technology into instruction in their school or district:
 - Scope and focus of budget allocations associated with technology integration (28%; n=10);

- Amount of technical support for computers, labs and other technologies (22%; n=8);
- Amount of on-site staff to support teaching with technology (e.g. professional development staff, technology integration specialists, etc.) (20%; n=7).

Participants' Responses to Forums

- Participants had a strong positive overall response to the forums:
 - Ninety-seven percent of respondents reported they would "definitely" (73%; n=27) or "probably" (24%; n=9) recommend this forum to a friend or colleague;
 - Nearly all participants responded the ideas and skills they learned from the forum will help them improve teacher effectiveness and student achievement by supporting and promoting the integration of technology (60%; n=21 said "definitely yes" and 37% n=13 said "probably yes");
 - Nearly all participants "agreed" or "strongly agreed" with the following statements about the training overall:
 - The training agenda was closely followed (100%; n=37);
 - The goals and objectives were clearly stated (100%; n=37);
 - Participants were engaged in group discussions on the topics presented (100%; n=36); and
 - The directions were clear for each of the modules and activities (100%; n=36);
 - The forum materials (e.g. curriculum guide CD-ROM) were helpful (100%; n=36).
 - Over three-quarters of participants felt "enough time" was spent on conducting and revisiting the ranking activity (92%; n=34), exploration of the NETS-A standards (87%; n=32), reviewing the resources available on the CD-ROM (86%; 31), and beginning creation of a personal action plan (78%; n=29). Over a third felt "not enough time" was spent on discussion of best practices (35%; n=13) and over a quarter felt that not enough time was spent on reviewing the Intel® Teach to the Future Web site and online resources available there (28%; n=10).

Participants' Responses to Master Leader

- The majority of participants responded their facilitator was "very:"
 - Responsive to questions they or their peers had about how to use the technologies focused on during the training (78%; n=29);
 - Skilled at helping participants develop ideas for their action plans (70%; n=26);
 - Effective at working with participants who were having trouble with portions of the curriculum (76%; n=28);
 - Skilled at facilitating group discussion or collaborative work (70%; n=26)
 - Comfortable presenting the curriculum in an interesting and dynamic manner (83%; n=30);
 - The trainer overall, was "very" effective at facilitating their experience of the forum (78%; n=28).

How Prepared Participants Felt to Use What They Learned in the Forum

- The majority of participants felt "adequately prepared" to continue building on the following activities they began in the Leadership Forum:
 - Continue to expand and refine their personal action plans (69%; n=30);
 - Implement elements of their action plan in their school or district (69%; n=25);
 - Share the resources provided during the forum with other administrators and teachers in their school or district (67%; n=24);
 - Encourage others in their school or district to explore professional development opportunities provided through Intel® Teach to the Future (80%; n=28).
- Participants' responses indicate the resources provided during the forum were useful to them as close to 70% of participants found the following activities to be "very useful" components of the forum:
 - beginning the creation of a personal action plan (69%; n=24);

- reviewing available resources on the CD-ROM (67%; n=24);
- collaborating with other leaders and administrators (67%: n=24), and
- reviewing the Intel® Teach to the Future Web site and online resources available there (67%; n=24);
- The majority of participants felt they would be "very likely" to consult the resources provided on the CD-ROM handed out during the forum (67%; n=24). Two-fifths reported they were very likely to consult the Leadership Forum Curriculum Guide (43%; n=26).
- Over half of participants reported the following statements described the forum to a "great extent":
 - Helped me to begin development of a personalized action plan that will advance the integration of technology into their school or district (64%; n=23);
 - Provided opportunities to engage in discussion and collaborate with other leaders and administrators (53%; n=19);
 - Presented an analysis of ISTE NETS-A standards and performance indicators (53%; n=19);
 - Examined the critical role educational leaders play in the integration of technology into teaching and learning (50%; n=18).
- Three quarters of participants identified stated school/district goals for technology integration as a "strong driving force" to influencing them to act upon the action plan they began to develop during the forum (75%; n=27);
- Close to 10% of participants identified two factors as "strong restraining forces" in their decision to act upon the action plan they began to create in the forum: scope and focus of budget allocations associated with technology integration (9%; n=3), and amount of technical support for computers, labs and other technologies in their school or district (8%; n=3).

(2) Discussion of Master Leader-led Leadership Forums

Although very few Master Leader-led trainings had occurred as of September 2005, researchers observed two of the three that took place in Summer 2005. Below is a discussion of the themes that emerged from these two trainings.

(a) Districts that had a clear sense of how the Leadership Forum training fit with broader district priorities concerning technology integration, especially as it related to teacher and administrator professional development, were the early adopters of the train-the-trainer program.

As was reported in the June 2005 Interim Report, many administrators who had been trained as Master Leaders said they were uncertain how and when they would hold a Leadership Forum and were eager to receive additional support in order to meet their commitment to train 10 colleagues. The few Master Leaders who had held forums said their success in pulling off a training - from recruitment to execution — largely depended on pre-existing district plans into which the Leadership Forum could be placed. For example, the forum in the western region of the country was embedded into a 15-hour principal training program. The four hours of the Leadership Forum served as a replacement for the technology planning section that the district had used previously during the two-day session. As a result, while participants had an interest in learning about technology integration at the classroom level, many said they attended the training to help them earn a credential and therefore receive higher pay. Knowing this to be the case, the Master Leader did not have the burden of incentive — participants were motivated to attend — nor did he have to struggle to find a way to make the curriculum fit their ongoing plans and responsibilities. At the outset of the training, he introduced the module format and the idea of constructing a personal action plan. And, he encouraged participants to do the following: "Think about the practicum you are required to do as part your principal training, which includes 15 hours of followup training. The two should overlap." Similarly, the forum in the northeast was part of a districtwide initiative that provided administrators with laptops and SMART Boards for their schools. Among the Participant Leaders were those who already had received their computers so they,

too, were motivated to learn new strategies for supporting teachers (and ultimately, students) with technology. As one participant explained, everyone in the room "volunteered to sign up for the larger program, but as part of this program there are lots of commitments – so this is voluntary, but mandatory."

(b) As Master Leaders rolled out the Leadership Forums to their colleagues, they localized the language, content and structure to better meet administrators' needs and expectations.

Although Master Leaders had not mastered the Leadership Forum materials as the Senior Facilitators had — for example, it took one Master Leader extra time to navigate to the "Unit Plans" and "An Innovation Odyssey" areas of the Innovation in Education website during a training — their close knowledge of their school districts served them well as trainers. Whereas Senior Facilitators often had to rely on fairly general examples when guiding the conversation, which was one of the most valued portions of the training. Master Leaders drew directly from situations that were relevant to participants' interests and concerns. This grounded participants' exchanges with one another in immediate needs, as often was the case in single-district Leadership Forums led by Senior Facilitators, without the risk of participants focusing on an issue that was unfamiliar to the trainer. Instead, with the Master Leader-led trainings both trainer and participants had a shared language and a common pool of issues and experiences on which they could rely. Often this meant forgoing labels they did not need, for example. Master Leaders were less likely to use the terms "Participant Leaders" or even "Leadership Forum" but, more importantly, Master Leaders' ties to participants' districts leant them a certain level of credibility. And credibility, for several participants, was a topic that was directly connected to effective technology use. Some said that when emphasizing technology integration among their practitioners, it was important that they, too, be seen as legitimate. As one principal said, "It's important to walk the walk. You can not teach what you do not know and you cannot lead where you will not go."

Aside from issues of language and the implicit and explicit messages they sent, Master Leaders adapted the curriculum as well as the sequence of activities to suit larger district goals. One Master Leader said it was important to customize the training, saying, "We rarely do 'you'll come' training anymore." For example, in addition to skipping the introductions section of the first module, as both Master Leaders had, one Master Leader did not have participants use the NETS-A Visual Organizer. Therefore, NETS-A was not formally tied to the action planning process. The other Master Leader told participants they need not focus on NETS-T but instead should continue to focus on their state standards for teaching. Similarly, in reviewing available resources in Module 5, one Master Leader instructed participants to remember the resources relevant to their work, which he had discussed in the non-Leadership Forum portion of their training. He said there was no need to focus exclusively on the forum materials as their needs and they needs of their teachers would be better served by a wide range of resources. Turning Point also was a topic of conversation as well as an example of slight variation. One Master Leader emphasized there were many other brands of software other than Turning Point and said it created the potentially cost-prohibitive challenge of only being able to load onto one laptop. The other Master Leader brought special attention to the use of Turning Point and led participants in a brainstorming session about the possible advantages of using it as an administrator ("It's a real time saver") and as a teacher ("It can used to get a baseline of student knowledge"). Use of the curriculum guide was also loosely adapted. In one forum, the Master Leader rarely referred to the curriculum guide and did not provide an overview of how they would use the guide throughout the training. There also was no transition between the PowerPoint slides, and the guide, nor did the Master Leader talk about what an Essential Question was or how the forum was guided by one.

(c) Despite Master Leaders' efforts to localize the Leadership Forums they led, it was still unclear if and how participants would sustain their use of their personalized action plan beyond the inperson training experience.

Participant Leaders attending Master Leader-led forums said they were committed to growing as instructional leaders in their schools but were all too familiar with the demands of their positions. Consequently, they were not certain how they would use forum tools, in particular their action plans, to support their teachers. And this tension between helping practitioners while also performing other duties was something with which Master Leaders were keenly aware. For example, one Master Leader said there was an expectation that principals spend an hour a day in the classroom but, he said, "Gravity pulls administrators to 'plant management' and away from instructional leadership. The only way they can fight this is to be in the classroom." One participant said the way she handles this tension is to protect the time she and other administrators are in the classroom by saying to those who ask," She's in surgery." This gave her protected time to remain in the classroom without interruption. Whether the analogy is to medical emergencies or car production, Master Leaders said they could only do so much to help participants develop action plans while they were together. Beyond that, they were not sure how they would follow-up with administrators and help them with their short-, medium- and long-term plans.

SECTION 5: RECOMMENDATIONS AND CONSIDERATIONS

The section includes recommendations related to the basic structure of the Leadership Forums and issues to consider as the train-the-trainer model moves toward Regional Training Agency (RTA) and Local Education Agency (LEA) coordination and localized ownership.

- Incorporate the combination of goals that Participant Leaders have expressed interest in developing (i.e. concrete strategies and visions of technology integration) into the forum so that both are actively addressed and discussed. Although administrators often experience tension learning how to help their teachers acquire concrete strategies for their classroom and developing a school- or district-wide vision they can implement over time, both are important components of technology integration. As Stanford Educational Leadership Institute's *School Leadership Study* suggests, "Growing consensus on the attributes of effective school principals shows that successful school leaders influence student achievement through two important pathways the support and development of effective teachers and the implementation of effective organizational processes."¹¹ Accomplishing these dual goals through the Leadership Forum will require an acknowledgement of the diversity of participants and their multi-tiered needs. Some administrators come to a forum expecting to see what "good instructional technology looks like" while others come to consult with colleagues about far-reaching leadership strategies.
- Address the diverse audience of Leadership Forums more specifically. Because technology directors, principals, and superintendents all see their priorities for technology integration to be slightly different due to the role they play in an educational community, including an explicit conversation around this topic would be helpful. Using the *Visual Ranking* exercise as a springboard into this discussion might be one possibility. Including a prompt to do this in the Master Leader and Senior Facilitator notes in the curriculum guide would also help.

Communicate a clear set of goals, commitments, and expectations for all phases of the Leadership Forum process (e.g. recruitment, commitment, scheduling procedures) OR allow trainers to define the goals they wish to pursue. Using a train-the-trainer model, as the Master Leader Trainings do, as a recruitment strategy makes the most sense in large districts where the demand for trainings is highest. However, the person who is likely to serve as a Master Leader in these districts also will have other professional development responsibilities. In an effort to meet a range of needs cutting across multiple programs and responsibilities, the forum's delivery and substance may have to be adapted. While there is value in inserting local concerns into the curriculum, if it is the priority to preserve the integrity of the Leadership Forum, a concept of localization that foregrounds this priority is important. Master Leaders and LEAs will need to understand what is expected of them and what falls under their discretion. This might include:

- Defining how LEAs go about selecting people to become Master Leaders;
- Including Master Leaders in a conversation about commitment, expectations, and skill sets necessary to lead a training prior to agreeing to become a Master Leader;

¹¹ According to the *School Leadership Study: Developing Successful Principals*, a report published through the Stanford Educational Leadership Institute (SELI), "Principals play a vital role in setting the direction for successful schools, but existing knowledge on the best ways to prepare and develop highly qualified principals is sparse." To help remedy the lack of understanding about what makes a leadership development program effective, the study will examine eight highly developed pre- and in-service program models to address key issues in developing strong leaders. Findings from the study will be published in December 2006 though a review of existing research and literature was published in August 2005. (See: http://seli.stanford.edu/research/sls.htm) Although Intel's Innovation in Education Leadership Forums Program is of a different nature than the programs in this study — each one is focused on a particular school district of school of education — it is worth placing the Leadership Forums in the broader context of this study as the program matures and potentially takes new shape.

- Communicating the technology specifications for where the Leadership Forum will be held;
- Giving districts the option of using co-trainers;
- Articulating what it means to "localize" a Leadership Forum in Master Teachers' districts; and
- Encouraging districts to embed the Leadership Forum into an existing and/or broader leadership training program.
- Consider the range of educational leaders who are being selected to be Master Leaders and either adjust the requirements for Master Leaders or include additional supports in the training materials. Master Leaders who are also Master Teachers come to the Master Leader Training (and the Leadership Forum) with a familiarity of the Intel® Teach to the Future programs and training experience as Master Teachers. However, other Master Leaders that do not have this experience will need additional resources to become familiar with Intel Teach to the Future. Also, not all of the Master Leaders come to the training as experienced professional development facilitators or being comfortable with facilitating trainings with technology. Those who do not have these background experiences also may need additional supports (beyond the Master Leader Performance Rubric, Turning Technologies online support, or Intel® Customer Service) to improve upon their skills in order to lead effective Leadership Forums in their schools or districts and to be comfortable leading these trainings.
- Identify support strategies and mechanisms that will help administrators continue to use their action plans beyond the four-hour session. Administrators, like all learners, require ongoing support in order to change habits and deepen their understanding of technology integration. A single event, such as a four-hour, face-to-face session, can begin this process but is unlikely to sustain it. While it may not be possible for Intel® Innovation in Education to offer additional trainings formally, encouraging districts to build in follow-up supports mechanisms will give the program a longer life locally.
- Separate the Master Leader training from the Leadership Forum. Separating the two would allow Master Leaders to make an informed choice about whether they actually want to lead forums and also give them time to reflect on their own experience as a Participant Leader, their technology vision, whether they really are a technology leader, etc. There are two ways to do this: one is to follow the Intel Teach to the Future Essentials Course and Workshop on Teaching Thinking with Technology Master Teacher/Participant Teacher model where Master Teachers go through a specialized training that models teaching techniques throughout; the second is to hold the Master Leader Training on a separate day from the forum to allow this reflection time.

APPENDICES

Appendix A

Frequencies of Participant Leaders' End-of-Forum Survey Responses (Leadership Forum led by Senior Facilitators) (Total N=1471)

Appendix B

Frequencies of Leadership Forum Follow-up Survey (May 2005) Responses by Participant Leaders (Total N=192)

Appendix C

Frequencies of Master Leaders' Response to Master Leader Training Survey (Total N=58)

Appendix D

Frequencies of Participant Leaders' End-of-Forum Survey Responses (Leadership Forum led by Master Leaders (Total N=37)