

**Addis Ababa Education Bureau (AAEB)**



**Eminence Social Entrepreneurs**

**Thinking Schools Ethiopia (TSE)**



**Thinking Schools International**

**Growing Thinking Schools Inside Out**

*a collaboration of*

**Whole School Transformational Change**

**Implementation Proposal**

## Table of Contents

3-11	<b>Proposal</b>
12-13	<b>Appendix 1 - Links and References</b>
15-19	<b>Appendix 2 - Leadership Training</b>
20-22	<b>Appendix 3 - Methodologies Expanded</b>
23-25	<b>Appendix 4 - Reflections and Testimonials</b>
26-27	<b>Appendix 5 - Criteria for a Thinking School (expanded)</b>
28-29	<b>Appendix 6 - Blended Professional Development: Video, DVD, Internet, Skype Training, Documenting</b>
30-31	<b>Appendix 7 - Addis Ababa Education Bureau Official Document to Implement Thinking Schools Ethiopia</b>
32	<b>Appendix 8 - UNESCO endorsement of Thinking Schools Ethiopia</b>
33	<b>Appendix 9 - Poster of Addis Ababa Thinking School with reflections from the whole learning community</b>

# Addis Ababa Education Bureau (AAEB) - Thinking Schools Ethiopia (TSE) - Whole School Implementation

## Introduction

The Thinking Schools International Ethiopia training uses research based thinking methods that are life long skills for use with problem solving in school, work and life. Projects with Thinking Schools International include over 500 UK schools; a whole country project in Malaysia; and additional projects in South Africa, USA, India, Thailand, and other countries. This brief document provides an overview of implementing Thinking Schools Ethiopia throughout the whole Addis Ababa Education Bureau (AAEB) school system, which then becomes a model for regional and whole country implementation. Thinking Schools International has experience in implementation on a school by school basis as well as whole country (Malaysia - see <http://www.ithink.org.my/Home/Index> which details the initial whole country implementation with Thinking Maps).

This document includes an overview of implementation (four stages in a each cycle/year); building capacity with Ethiopian trainers to become the lead trainers; building capacity with whole school implementation; building collaborations between school principals and supervisors; use of video to continue learning; developing professional learning communities (PLC) with school teachers and principals; overview of a school site visit demonstration day.

In Ethiopia, the AAEB Expert team received an initial week long training in late 2012 (documented on the TSE website). Previously over 2000 Ethiopian educators have participated in Growing Thinking Schools trainings since 2010. Recently Thinking Schools Ethiopia facilitated (June 2013) training for 40 school principals of government schools as part of the All Children Reading Initiative funded through Initiative Africa by USAID and World Vision. Further information and video reflections of participants are online at [www.thinkingschoolsethiopia.com](http://www.thinkingschoolsethiopia.com)

The training will be scaffolded from 1. training ALL AAEB Principals and Supervisors; 2. training Leadership teams at the sub-city level in their respective sub-cities; 3. schools site visits; 4. and include video training part of the blended professional development model. This 'cycle' would then be repeated with more extensive training following the same implementation model. More extensive training includes Thinking Maps; Thinking Maps for writing; Reflective Questioning; Collaborative Learning; Structuring Environment.



The Growing Thinking Schools International Ethiopia training is coordinated by a Thinking Schools International Global Trainer. The TSI Global Trainer trains TSE (Thinking Schools Ethiopia) trainers and the AAEB experts to become the lead trainers locally, regionally and nationally. These trainers become part of a global network of trainers collaborating throughout the world. Further information on TSI is at [www.thinkingschoolsinternational.com](http://www.thinkingschoolsinternational.com)

The Thinking Schools International methods are research based that are used extensively in schools and education organizations worldwide. Research may be accessed at [www.thinkingfoundation.org](http://www.thinkingfoundation.org). Research on the Thinking Foundation site shares dissertations, research, video, case studies and more on Thinking Maps® used successfully in:

- Pre-K and Elementary K-5
- Middle and High School 6-12
- University and Colleges
- NGOs and Business

Thinking Maps and the other Thinking Methods of TSE/TSI are used in ALL disciplines and grade levels including literacy, applied sciences, math, ELL, special needs, social sciences, music and other subject areas. The use of Thinking Maps and other Thinking Methods elevate student learning to higher levels in Bloom's Taxonomy. See the Growing Thinking Schools Inside Out guide for further examples.

The first cycle would focus on Thinking Maps (Visual Mapping) for mastery with inclusion of Collaborative Learning and Reflective Questioning. This would provide a basis and foundation of success for students and teachers.

## Thinking Schools Overview

Thinking Schools Ethiopia (TSE) has been collaborating with educators and schools in Ethiopia for the past three years using thinking skills that are student centered life long thinking skills for all students, teachers and leadership in the whole school community.

Thinking Schools Ethiopia (TSE) is a student centered approach providing thinking methods for all disciplines and grade levels in schools (K-12 + university) and as a life long learner. The approach provides a common visual language to explore, discover and learn in a collaborative environment that supports and sustains the creativity and innovation of the whole school educational community. Specifically the focus of Thinking Schools Ethiopia is using the ***Six Starting Points for Thinking***, research based methods including:

1. **Reflective Questioning** high quality questioning and listening skills (e.g. shared inquiry, questioning for inquiry)
2. **Thinking Skills** explicit use of cognitive processes
3. **Visual Mapping** the use of visual tools to map out ideas. (e.g. **Thinking Maps**).
4. **Collaborative Networking** between us in pairs, groups, schools, and global networks that includes collaborative learning; collegial coaching
5. **Developing Dispositions** characteristics, dispositions, and **Habits of Mind** are engaged
6. **Structuring a Thinking Environment** considering how the physical space is organize and resources used

The ***Six Starting Points for Thinking*** are life long skills for use with problem solving in school, life and work. Thinking Schools International projects currently include over 500 UK schools; a whole country project in Malaysia; and additional projects in South Africa, USA, India, Thailand, and other countries. Thinking Schools International has experience in implementation on a school by school basis as well as whole country (iThink in Malaysia).

### How is it different from existing approaches?

The Thinking Schools Ethiopia (TSE) approach is a whole school systems approach that building capacity inside out developing a foundation that is reflective, sustainable, collaborative and replicable. TSE is part of a greater global collaboration that supports multi-directional development. Multi-directional development is a belief system and model where all participants recognize their own capacity for aiding the others globally: ideas and innovation originate within and across ALL places globally. The Thinking Schools Ethiopia training uses research based thinking methods that are life long skills for use with problem solving in school, life and work.

### Sustainability

The Thinking Schools Ethiopia model is implemented in a scaffolding model to build expertise and capacity within the whole school and the school system. This includes both the methodologies as a common way of thinking and the people with their pedagogical practice. This includes Leadership training as a key part of the whole school change of transformational design.

### Methodologies

The initial Growing Thinking Schools Inside Out Training uses the ***Six Starting Points for Thinking*** as a process to develop understanding and a plan. Thinking Maps are a key method used in the initial training with significant use of collaborative learning, reflective questioning, structuring environment.

### People

The training begins with building capacity with the AAEB Experts team to work collaboratively with the TSI Global Trainers and the TSE Lead Facilitators. Then the capacity is built within school principals and supervisors who train school leadership teams. The whole school staff then works collaboratively under the guidance of the leadership team. Teams of educators continue to work collaboratively at the sub-city level.

## Vision and Outcomes

The vision and outcomes of Thinking Schools Ethiopia collaboration with the Addis Ababa Education Bureau is to bring current research based thinking methods to the whole AAEB system as a whole school model. The visioned outcomes include:

- thinking methods supporting and growing student centered learning
- highly effective teachers implementing current research based thinking methods
- collegial coaching and professional learning communities of educators and school leaders
- leadership tools that support improved student outcomes as life long learners and testing outcomes
- Thinking Maps for organizing thinking, writing, across disciplines, as an assessment tool, as a leadership tool
- action research and ongoing assessment become part of the educator and whole school practice
- whole school collaboration and change
- parents knowledgeable of thinking methods
- student exercise books reflect the practice of thinking methods
- Addis Ababa University (or other Ethiopian higher education) becomes certificating body for 'thinking schools' and student teachers are learning and part of the global university thinking network
- use of video and DVD for extended teacher and leadership training (blended learning)
- improved student test outcomes (see examples on the research site [www.thinkingfoundation.org](http://www.thinkingfoundation.org) )

## Research

There is an extensive body of research on the use of Thinking Schools methods. Go to the Thinking Foundation website including many Ph.D. dissertations, video clips, masters thesis, case studies and more. Also on the website is a recent documentary film Minds of Mississippi documenting an astounding whole district success story as the top performing district in the state for many years. [www.thinkingfoundation.org](http://www.thinkingfoundation.org)

## Accreditation and Criteria for Thinking Schools

Some schools choose to engage in a reflective process that ultimately leads to recognition as a "Thinking School." This accreditation process is an opportunity for schools to engage in a highly descriptive, enquiry process, whose primary purpose is to use the information they generate to continue to inform, guide, and inspire their ongoing development as a thinking school. Thinking Schools Ethiopia and the AAEB will collaborate with Addis Ababa University (and networking with other Thinking Schools accrediting universities globally) with the criteria and accreditation of Thinking Schools. The five Thinking Schools Criteria are:

1. Student Centered Thinking
2. Facilitative Leadership
3. Integrated Professional Learning
4. Interactive Assessment
5. School-Wide Ethos

The process is (see appendix for full description):





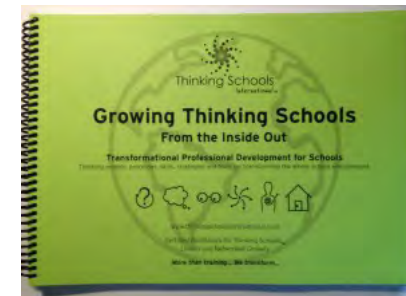
## Practical

Thinking Schools methods require minimal, if any, outside materials. What is needed is school leaders, teachers and students immersed in understanding and using **the six starting points for thinking**. An example is Thinking Maps® which are visual cognitive mapping for organizing thinking. The goal is patterning the mind with thinking methods. Thinking Maps can be used on paper, on the ground with chalk, in dirt with a stick, etc. The important aspect is knowing the cognitive process (e.g. sequencing, cause and effect, etc.) and being able to create the appropriate map. Please consult the TSE website blog for examples of using Thinking Maps in a rural Ethiopia setting on the ground, in Ethiopian government schools and other Ethiopian and global locales.

## Objectives

The Thinking Schools Ethiopia Initiative will be implemented in a logical sequence. This began with initially working with over 2000 Ethiopian educators the past 4 years.

- The AAEB Expert team participated in five days of Thinking Schools training in late 2012
- The principals and supervisors from 300+ AAEB schools representing the 10 sub-cities will be trained in TSE using the Growing Thinking Schools Inside Out training and guide. They will also receive initial Thinking Maps professional development as part of the training
- The trained principals and supervisors will collaborate with TSE trainers and/or AAEB experts to train expanded leadership teams from each school (5-6 participants) at the sub-city level.
- Each school's leadership team in collaboration with TSE trainers and/or AAEB experts will receive twice monthly on-site support beginning training the whole staff on TSE approach including Thinking Maps, collaborative learning and reflective questioning.
- Regular regional trainings at the sub-city level for Leadership; Thinking Maps; Assessment and Action Research; Reflective Questioning; Collaborative Learning; Structuring Environment.
- Blended professional development model that includes (in addition to in person training) video, DVD, and phone delivery of training



## Training with AAEB Expert Team – November 2012

“This training is a pilot project (August 2012 training with AAEB expert team), next we’ll go to schools (December 2013). We will train teachers and principals. Gradually the program will be at a national level. Let alone your job or other businesses, it helps even in our day to day life [Thinking Schools approach and methods]...”

*Dilamo Otores Ferenje – Head of Addis Ababa Education Bureau (AAEB)*

“I would like to see this continue in some form. Thinking Schools training was a complete success. It would benefit to have this training on an ongoing basis for public school teachers that would assist the whole education system in the country. This was a workshop about changing minds and acquiring a new set of beliefs about what education is all about.”

*Awol Endris, Ph.D. ; Program Officer, Education and Training*

*UNESCO - International Institute for Capacity Building, Addis Ababa, Ethiopia*

# Thinking Schools Guides and Handbooks

## 1. Growing Thinking Schools Inside Out

Growing Thinking Schools Ethiopia Inside Out is training and the accompanying guidebook, much like a travel guide and/or website that you have closely looked through before visiting a new place, with information about different pathways for investigating a new concept. Growing Thinking Schools training and guidebook is only used with support of a certified Thinking Schools International trainer and Thinking Schools Ethiopia trainers who will guide you and your colleagues through a process of:

- envisioning what a “Thinking School” might look like in your culture and environment;
- considering the different possible approaches you may take; and
- beginning the planning stage for the short and long term process of explicitly and systematically integrating “thinking” processes into the existing “learning” processes within your school.
- how cognitive thinking methods and skills reflect and respect local Ethiopian culture

*The Growing Thinking Schools Inside Out handbook is in English and translated into an Amharic edition.*



## 2. Thinking Maps® (students): Thinking Maps®: A Language for Learning

Thinking Maps are eight specific visual patterns representing universal human cognitive processes (e.g. sequential, cause and effect, whole/part, compare and contrast, classifying). Visualizing our thinking allows us to have a concrete image of our abstract thoughts. Visual representations enhance the brain's natural ability to detect and construct meaningful patterns. Thinking Maps reduce anxiety by providing familiar visual patterns for thinking and working with complex ideas and situations. Thinking Maps provide a tool to organize thinking for all disciplines and as a frame for developing successful patterns for thinking, writing, presenting and speaking.

Research: “Although thinking is innate and spontaneous, skillful thinking must be cultivated.” -Art Costa, The Thought-Filled Curriculum

Thinking Maps for Leadership

## 3. Thinking Maps®: A Language for Leadership, Second Edition

Thinking Maps training and text for all leaders and leadership teams in a school community for the purpose of deepening a Thinking Maps implementation. Thinking Maps®: A Language for Leadership provides leaders with strategies for using Thinking Maps to improve communication, data analysis, problem solving and decision-making with the whole school community.

## 4. Collaborative Networking

Collaborative Learning

Collaborative networking is a systems approach that includes collaborative learning for students; community building for the whole learning community; and collegial coaching for the educators as part of a professional learning community (PLC).

## 5. Reflective Questioning

Questioning for Enquiry provides educators a deep understanding of using shared inquiry with children and for leadership.

# AAEB - Thinking Schools - Whole School Implementation

The training would be scaffolded from initially training ALL AAEB Principals and Supervisors to training Leadership teams at the sub-city level in their respective sub-cities to schools site visits followed by video training. This 'cycle' (trainings 1, 2, 3, 4) would then be repeated with more extensive training following the same implementation model.

## Training Details

### Training 1

**Duration:** 3 full days

**Who:** Principals, Supervisors from all 300 AAEB schools

**When:** January 2014

Where: Large training facility with a hands-on 'theater in the round' presentation (either 2 or 3 groups)

**Title:** Introduction to Thinking Schools

**Number of Participants:** 3 trainings of approximately 150 participants each.

**Trainers:** TSI Global Trainers (Robert Price & Larry Alper); 10 TSE Trainers; 10-20 AAEB Experts

### Training 2

**Duration:** 2 full days

**Who:** Leadership Teams (principal + 2-3 lead teachers) in each sub city

**Title:** Visioning Session Training + hands-on learning of methodologies

**Number of Participants:** ~30 schools in each sub city for a total of 90-120 participants

**Trainers:** TSI Global Trainers (Robert Price & Larry Alper); 10 TSE Trainers; 10-20 AAEB Experts

### Training 3

**Duration:** 2 full days

**Who:** Whole School

**Title:** Whole Staff Training at School Sites

**Number of Participants:** Whole teaching staff at the school site

**Trainers:** TSI Global Trainers 10 TSE Trainers; 10-20 AAEB Experts

**Substitute Teachers:** coverage for teachers to participate with demonstration lessons in classrooms

### Training 4

**Duration:** weekly

**Who:** Whole School

**Title:** Follow-up and on-site support using video, skype and consultants (trainers)

**Number of Participants:** Whole teaching staff at the school site

**Trainers:** Weekly video training at school site; central location; available to view in school

**Video:** includes demonstration lessons, courses

## Training Description

### Growing Thinking Schools AAEB principals + supervisors

Using the Growing Thinking Schools Inside Out handbook participants have hands-on professional development using Thinking Maps; Collaborative Learning and Reflective Questioning to understand their needs and frame of reference while learning (and using) the transformational thinking methods that will be used to lead their school and with the students.

### Growing Thinking Schools sub-city level

The same training as training 1, except this time in each sub-city for school leadership teams. This increases the expertise of the principals and supervisors while building the capacity with lead teachers.

### Growing Thinking Schools school site visits

This training focuses on using Thinking Maps and Cooperative Learning including a before and after school training, demonstration lessons for all teachers to see throughout the day for all levels at all schools.

### Growing Thinking Schools school site visits

This training focuses on using Thinking Maps and Cooperative Learning including a before and after school training, demonstration lessons for all teachers to see throughout the day for all levels at all schools.

## Training Facilitators

**TSI Global Trainers:** 2 for 9 days

**TSI Global Trainers:** 2 for 14 days

**TSI Global Trainers:** 2 for 14 days

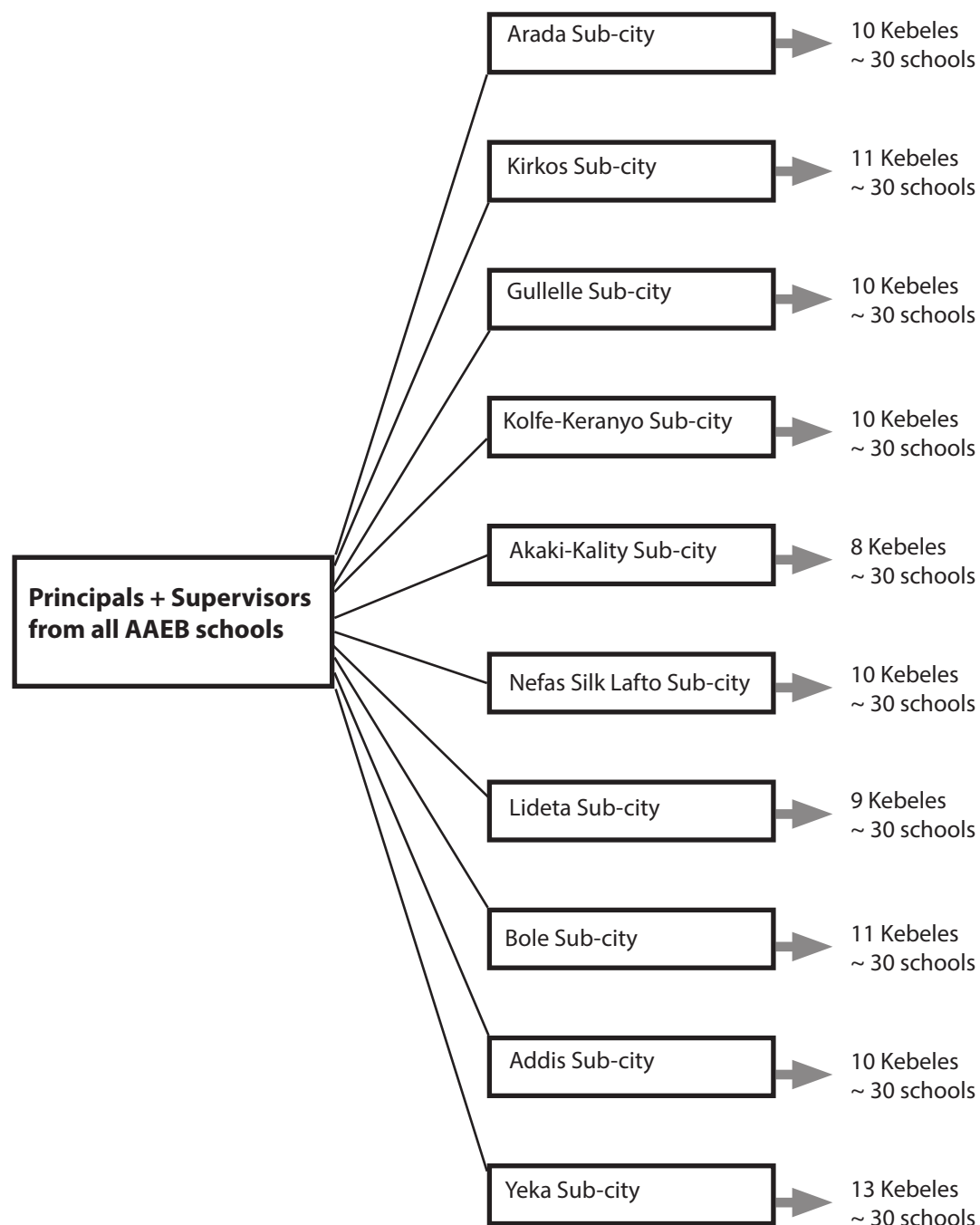
**TSI Global Trainers:** 2 for 10 days

**TSE Trainers:** ten trainers (10) for 12 months

**AAEB Experts as Trainers:** twenty trainers (20) for 12 months

**Video Production Crew:** 4 videographers; 2 film editors; 1 designer; 2 producers; coordinator; Internet lead person —11 person video/media team for 12 months x 2 years.





**1.** Each schools sends a princpal(s) and supervisor(s) to the whole district training of Growing Thinking Schools and Thinking Maps®.



**2.** Each school sends a leadership team (5-6 team members) to Sub-city Level training of Growing Thinking Schools and Thinking Maps®.



**3.** Each school trains the whole school staff at the school site on Growing Thinking Schools and Thinking Maps®. Two neighboring schools work collaboratively.



**4.** Each school receives ongoing support with whole day trainings from TSE Facilitators and AAEB Experts with ongoing modeling of Thinking Schools implementation at the school site.



**5.** Principals and Supervisors go to monthly trainings at the Sub-city Level. Possible to combine two Sub-cities.



**6.** Specific Thinking Schools Trainings at the Sub-city Level including Thinking Maps; Collaborative Learning; Reflective Questioning; Dispositions; Structuring Environment; Assessment and Action Research.



**7.** DVD and Video development of model lessons from the demonstration lessons at the site visit to create an ongoing library of professional resources.

## School Site Visit Demonstration Lesson Day (Thinking Maps® Example)

*This model would be applied with other Six Starting Points for Thinking methodologies as well.*

**Purpose:** for whole staff to see how Thinking Maps® are implemented during one school day; create discussion amongst the staff; build a PLC (Professional Learning Community) through modeling and doing; create a video library of implementing Thinking Maps®, developing a collegial coaching model.

**Goals:** The whole staff will see the success of using Thinking Maps®, be part of collegial dialogues in small groups and the whole school, develop discussion on the use of maps as content and the hows of pedagogy implementing the maps with students. The goal is to have the whole staff engaging and collaborating together.

**How:** There are three key steps to the Demonstration Lesson Day including a briefing -> lesson -> debriefing

Prior to the demonstration lessons, the TSE facilitator (or other facilitator) meets with the whole staff before school starts to provide an overview of the day. The facilitator engages the whole staff in any questions they have in regards to the implementation of Thinking Maps® using a Circle Map to record their questions and a Tree Map to sort their questions.

Demonstration lessons will replicate the same process 5 times (5 hours total). Each lesson will model introduce a Thinking Map® (whole group, then small group) with age appropriate content that is currently being studied. Each hour will include:

- a briefing (approximately 10-15 minutes);
- the lesson (15 min, 20 min maximum);
- debriefing (15-20 minutes);



The first Demonstration Lesson Day will have the TSE or TSI Facilitator doing the lessons. The

second Demonstration Lesson Day will have a teacher leading a lesson with the TSE Facilitator coaching (if needed). The teachers will do a lesson in another teacher's room (not their own children). This model of Instructional Collegial Coaching can continue throughout the year with appropriate scaffolding with use of Thinking Maps®, writing, etc.

### The Day:

1. meet with the whole staff before school (described above)
2. one hour block of briefing—lesson—debriefing x 5 throughout one day (described above)
3. meet with the whole staff after school - debrief the day *answering* many of the questions developed with the whole staff in the morning

### Structure:

- 10 substitutes would be used for classrooms of participating teachers with coverage
- the classroom of the demo teacher will need coverage too - to be part of briefing and debriefing
- the TOT would be in all five demonstration lessons (threads the day)
- video tape the lessons if possible (a student can be the videographer)
- include specialists and support (classified) staff as well provide food at lunch

# Participatory Action Research

## Why? and Defining & Purpose

Teaching (and leading schools) is an isolating profession. In most professions colleagues regularly observe and learn with one another. Teachers are often isolated in their own rooms. Action research, combined with collegial coaching provides the tools and reflective model for teachers and school leaders to regularly learn, understand and grow with their pedagogical practice.

Action research is a process in which participants examine their own educational practice systematically and carefully, using the techniques of research. It is based on the following assumptions:

- Teachers and principals work best on problems and interventions they have identified for themselves
- Teachers and principals become more effective when encouraged to examine and assess their own work and then consider ways of working differently
- Teachers and principals help each other by working collaboratively
- Working with colleagues helps teachers and principals in their professional development. Action research specifically refers to a disciplined inquiry done by a teacher with the intent that the research will inform and change his or her practices in the future. This research is carried out within the context of the teacher's environment—that is, with the students and at the school in which the teacher works—on questions that deal with educational matters at hand. (Watts, 1985)

Collegial coaching is a process in which two or more professional colleagues work together for a specific, predetermined purpose in order that professional performance can be improved as well as validated. The purpose may be to reflect on current practices or to expand, to refine, and build new skills. Collegial coaching can be utilized to share new ideas; to teach one another; to conduct observations of meetings or workshops; or to solve problems in the workplace. Collegial coaching is non judgmental, and non evaluative. Collegial coaching is focusing on the collaborative development, refinement and sharing of professional knowledge and skills, as well as developing alternative behavior.

## What is your Question(s)?

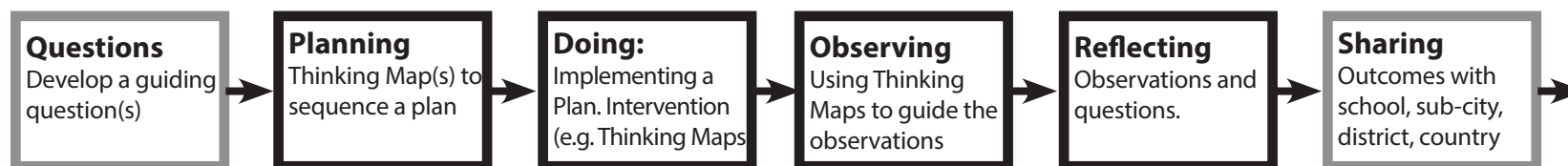
Develop 1-3 questions that are guiding your action research. What is it you are trying to determine, learn, understand to support your reflective practice.

## Your Plan

Map out a plan (use Thinking Maps!) to develop a plan to collect information and data to have a deeper understanding of what you are trying to learn. What is your focus? Is it a new intervention or strategy (e.g. Thinking Maps for writing)? What is it you would like to learn (your question)?

## Individual or Team?

Are you working as an individual or a team. Consider the benefits of each.



## **Appendix 1**

### **References and Links**

#### **Eminence Social Entrepreneurs**

[www.eminence-se.org](http://www.eminence-se.org)

#### **Thinking Schools Ethiopia** (part of Eminence Social Entrepreneurs)

[www.thinkingschoolsethiopia.com](http://www.thinkingschoolsethiopia.com)

The vision of Thinking Schools Ethiopia is for all Ethiopian children to have an opportunity for access to high quality education led by trained and certified Ethiopian educators that becomes a multi-directional model of education nationally and internationally. The Thinking Schools Ethiopia Government Schools Proposal for schools in Addis Ababa is a collaboration between Thinking Schools Ethiopia (Eminence) and Thinking Schools International..

#### **Thinking Schools International**

[www.thinkingschoolsinternational.com](http://www.thinkingschoolsinternational.com)

Thinking Schools International (TSI) was established in 2010 and is a partnership between Kestrel Education in the UK and Designs for Thinking in the US. The aim – to facilitate a whole school approach to the development of students’ thinking skills for organizations across the globe who are committed to develop 21st Century Learning.

#### **Thinking Foundation**

[www.thinkingfoundation.org](http://www.thinkingfoundation.org)

Thinking IS the Foundation for Learning

The mission of the non-profit Thinking Foundation is to support high quality research on cognitive skills development, creativity, and critical reflection—at pre-school, K-12 and college levels in order to transform learning, literacy, teaching and leadership around the world for those with the greatest need.

#### **Thinking Maps**

[www.thinkingmaps.com](http://www.thinkingmaps.com)

Thinking Maps are eight specific visual patterns. Visualizing our thinking allows us to have a concrete image of our abstract thoughts. Visual representations enhance the brain’s natural ability to detect and construct meaningful patterns. Thinking Maps reduce anxiety by providing familiar visual patterns for thinking and working with complex ideas and situations.

*Research: “Although thinking is innate and spontaneous, skillful thinking must be cultivated.” -Art Costa, The Thought-Filled Curriculum*

Thank you Geoffrey Suddreth, General Manager of Thinking Maps®, Inc. and David Hyerle, creator of Thinking Maps® and founder of Thinking Foundation for providing use of Thinking Maps® with professional development for school leaders, NGO leaders and educators in Ethiopia.

[www.thinkingmaps.com](http://www.thinkingmaps.com)   [www.thinkingfoundation.org](http://www.thinkingfoundation.org)

#### **Minds of Mississippi documentary film**

[www.thinkingfoundation.org](http://www.thinkingfoundation.org)

The Pass Christian Public Schools received a grant from Thinking Foundation to document their incredible story. The story of “The Pass” began before the hurricane Katrina, continued as their whole community was “wiped off the map” in 2005, and has been sustained at the highest levels (2013) by staying focused on the map for improving students’ thinking. Thinking Foundation proudly presents the recently premiered film Minds of Mississippi. Watch the trailer of the “made for TV” documentary on the Thinking Foundation website.

## **References and Links** *continued*

**Books** • [www.thinkingfoundation.org/mom/index.html](http://www.thinkingfoundation.org/mom/index.html)

### **Articles**

Assessment: <http://www.thinkingfoundation.org/david/books/TMapsAssessJournal.pdf>

Collegial / Peer Coaching: [http://www.eggplant.org/pamphlets/pdf/joyce\\_showers\\_peer\\_coaching.pdf](http://www.eggplant.org/pamphlets/pdf/joyce_showers_peer_coaching.pdf)

### **Ethiopian Educator Quotes in Proposal**

Video Clips of the included quotes from AAEB principals and AAEB experts

[www.thinkingschoolsethiopia.com](http://www.thinkingschoolsethiopia.com)

### **Robert Price - Thinking Schools International Global Trainer**

[www.eggplant.org](http://www.eggplant.org)

Robert Price's collaboration with Thinking Schools Ethiopia (TSE) for the past several years includes regular visits to lead and co-facilitate trainings in Ethiopia. Over 2000 educators and many whole schools have participated in the multiple day workshops. This work has led TSE to being endorsed by UNESCO and has a memo of understanding for implementation with the whole Addis Ababa Education Bureau 300 government schools.

Robert is a global trainer for Thinking Schools International (TSI), works with Thinking Foundation and is a certified Thinking Maps® trainer. Robert is the co-author of Growing Thinking Schools Inside Out, the TSI handbook for understanding and implementing the six starting points of thinking. Robert is experienced in facilitating visual tools (Thinking Maps®), Reflective Questioning, Collaborative Learning (students and educators), Structuring Environment and Dispositions (Habits of Mind) - all starting points of thinking. Most recently Robert is a contributing author on TSE for an upcoming book on thinking to be published by Corwin Press. He is currently developing and implementing structuring environment curriculum.

Previously Robert consulted for National Urban Alliance (NUA) in many capacities including leading professional development (K-12), training new national trainers, and implementing technology. NUA provides professional development, advocacy and organizational guidance that transforms urban and suburban schools. His work included whole district long term projects in Seattle, Indianapolis, New York City, and Birmingham USA. He more recently piloted a student voice initiative that now is a key component of all NUA projects.

Robert's collaboration with Ethiopian educators is a multi-directional experience — learning and growing with each other. He believes the collaborative spirit of Ethiopians, the interest in current education practices (student centered learning) and fierce pride of Ethiopians all point to the potential of the Ethiopian education system being a global model of transformational design.

### **Larry Alper- Thinking Schools International Global Trainer**

[www.designsforthinking.com](http://www.designsforthinking.com)

Larry Alper, M.S. is Co-Director for Designs for Thinking, leading implementations of Thinking Maps in whole schools while also supporting schools and school systems in developing long term plans for implementing these tools. In the last four years of an 18 year career as an elementary school principal in Brattleboro, Vermont Larry facilitated the successful implementation of Thinking Maps and Software and Write From the Beginning. He also investigated how he and his colleagues could use Thinking Maps as collaborative tools for building leadership capacity. This process led him to co-author the new guide and training, Thinking Maps: Leading with a New Language.

*Eminence Social Entrepreneurs* [www.eminence-se.org](http://www.eminence-se.org) • *Thinking Schools International Ethiopia* [www.thinkingschoolsethiopia.com](http://www.thinkingschoolsethiopia.com)

*Robert Seth Price - Thinking Schools International* [www.thinkingschoolsinternational.com](http://www.thinkingschoolsinternational.com) • *Thinking Foundation* [www.thinkingfoundation.org](http://www.thinkingfoundation.org)



## References and Links *continued*

### **Atsede Tsehayou - Thinking Schools Ethiopia Program Coordinator**

[http://blog.thinkingschoolsethiopia.com/?page\\_id=1474](http://blog.thinkingschoolsethiopia.com/?page_id=1474)

Atsede is a Thinking Schools Ethiopia (Eminence Social Entrepreneurs) Program Coordinator at Eminence Social entrepreneurs which is based on delivering world class training to capacitate schools teach quality education. Prior coming to Eminence Atsede served as assistant lecturer at New Millennium College, SOS Herman Geminier school as civic and geography teacher and as a social studies teacher at Children's home Academy and Maya international School. Moreover, Atsede took her BA in Geography and environmental studies from Jimma University. Graduate School of Education from Addis Ababa University, where she received her masters in geography and environmental education in 2011. She has worked with a number of private schools, NGOs, and different organizations in her teaching endeavors. Her teaching interests and experience include the areas of professional development training, coaching, and tutoring students at different levels. She has also given trainings extensively on comparative and developmental education topics with an emphasis on higher order thinking levels. She has a certificate from Capacity Building Training from SOS HERMAN GMEINER School.

### **Dagim Melese - Thinking Schools Ethiopia Program Coordinator**

[http://blog.thinkingschoolsethiopia.com/?page\\_id=1680](http://blog.thinkingschoolsethiopia.com/?page_id=1680)

Dagim was born in Bale Goba, Southern Ethiopia and raised in Addis Ababa, the capital of Ethiopia. Dagim completed his primary and secondary levels of education in Private and Public schools. His interests in the social sciences led him to deciding to be placed in the social science stream. After having completed the high school education, he was a student Kotebe College of Teachers Education (KCTE) where he completed his degree. He studied Geography with a minor in Civic and Ethical Education.

Later, he worked as a teacher of social studies in a primary school while educating himself further in Geography and Environmental Studies in the University of Addis Ababa earning a Bachelor of Arts Degree. He then spent several years teaching Civic and Ethical education and Geography in primary and high schools during which the inspiration mentored by professors in the University in the Department of Geography and Environmental Studies shaped the decision he made to further advance his education.

The impetus, inspiration, object of professional vision and meaning, and insights for personal development he got was from the most exciting and richly arousing professional training he received while working in a school called Children's Home Academy from Robert Seth Price of the Thinking School International. Simultaneously, he was attending a two years Masters program in the College of Education and Behavioral studies of the University of Addis Ababa and earned a Masters of Education Degree in Geography and Environmental Education. He is now working as a training facilitator in a private company called Eminence Social Entrepreneur in the department of Thinking School Ethiopia.

He is still freshly motivated to better understand how human brain learns and to put that to use to help children and students learn more efficiently which he believes is fundamentally important in terms of creating a thoughtful, healthy, prosperous, caring, and sustainable society

## Appendix 2

### Training 1: Growing Thinking Schools Inside Out Leadership Training

#### STEP 1 • Who are we? What is a Thinking School? What is a thinking student?

The first step begins with school leadership participating in a three day professional development workshop led by a certified TSI trainer in collaboration with TSE trainers. Each participant is given the Growing Thinking Schools guide (published by TSI: © 2011) that is used during the highly collaborative training and as a continuing resource over multiple years as you expand your focus. This guide is translated for use in different countries.

All participants have access to a web-based extensive resources and activities for immediately improving thinking across your whole school. Specifically, you will have access to activities that engage the 6 Starting Points practiced during the seminar.

#### Six Starting Points for Thinking

The leadership learns, practices and understands the focus of Thinking Schools Ethiopia is using the *Six Starting Points for Thinking*, research based methods including:

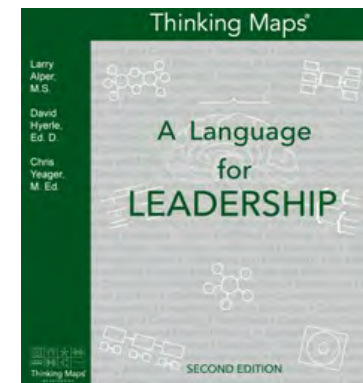
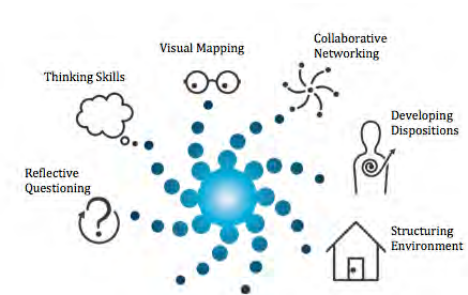
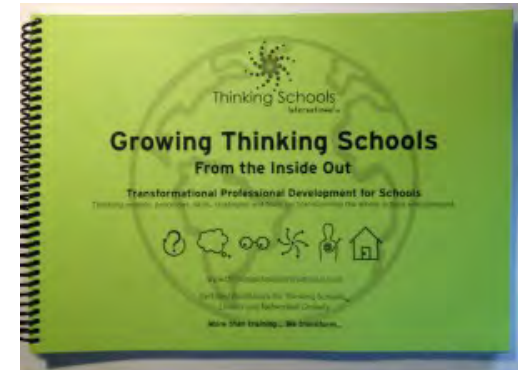
1. **Reflective Questioning** high quality questioning and listening skills (e.g. shared inquiry, questioning for inquiry)
2. **Thinking Skills** explicit use of cognitive processes
3. **Visual Mapping** the use of visual tools to map out ideas. (e.g. **Thinking Maps**).
4. **Collaborative Networking** between us in pairs, groups, schools, and global networks that includes collaborative learning; collegial coaching
5. **Developing Dispositions** characteristics, dispositions, and **Habits of Mind** are engaged
6. **Structuring a Thinking Environment** considering how the physical space is organize and resources used

#### Why the Same Thinking Methods for Leaders?

Thinking Maps, reflective questioning, collegial coaching (collaborative learning), action research, dispositions, and building community are life-long thinking skills. Skills and methods we teach children as learners are the same tools we use as educational leaders to lead whole school staffs. The *Starting Points for Thinking*, are both methods and tools for students as well as educational leaders leading their staff.

#### Training 1

This training, Training 1 with leaders from all AAEB schools, is the foundation for scaffolding the Thinking Schools Ethiopia methods to the sub-city levels with school leadership teams, then to the schools sites with the whole school staffs.



## STEP 2 • Creating an Action Plan

During the Leadership Training, TSI and TSE trainers introduces the AAEB educational leaders to the “big picture” vision of the journey of a “Thinking School” over multiple years. TSI and TSE commit to supporting the leaders and their whole schools vision and plan for Growing a Thinking School—from the Inside Out. The AAEB educational leaders will be systematically introduced to and explore through using the **Starting Points for Thinking**, for developing student thinking and performance, and improving teacher effectiveness as well. The session is highly interactive, learner centered (mirroring student centered approach), practical in methods while global in seeing a sustainable big picture. By the end of the workshop, all participants will experience practical applications of these **Starting Points for Thinking** using different models, approaches, techniques and tools.



## STEP 3 Focused Implementation

TSI has discovered over the past ten years that successful school leadership teams that have created Action Plans that have initially focused on one of the **Starting Points for Thinking** are successful. Practical, student-centered methodologies that have a proven, significant positive impact on thinking, learning and teaching. Usually visual tools, such as Thinking Maps® are a logical first method for the leadership used to think and lead, the teachers to think and lead the students, and the students to think and lead collaboratively. Additionally during the initial three day Leadership Training, significant emphasis is also placed on the integration of Reflective Questioning, Collaborative Learning (collegial coaching), Structuring Environment and Dispositions. The emphasis is on Visual Tools for Thinking (Thinking Maps®) which provide a research proven tool that is used globally to see and share ones thinking collaboratively. Focusing on only one Starting Point initially, is essential because we have also discovered that trying to implement a wide variety of tools, strategies, models and techniques is counter productive: it becomes disjointed and overwhelms everyone.

## STEP 4 Focused Implementation of Thinking Maps as a Language for Leadership

The third day of the training places an emphasis on the use of Thinking Maps as a Visual Language for Leadership.

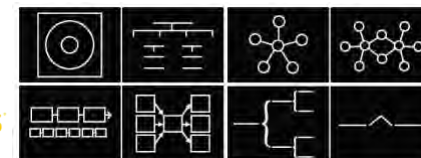
### Thinking Maps

Leadership training includes:

- Understand Thinking Maps and Research Connections
- Use Thinking Maps for Communication and Collaboration
- Use Thinking Maps During Professional Learning Communities (PLC) Meetings and for Problem Solving
- Create an Implementation Plan for Sustaining Thinking Maps at Your School (Ongoing Monitoring and Assessing Using a Rubric)

The Thinking Maps are tools for Educational Leaders to:

- Problem Solve
- Facilitate Collaborative Meetings
- Supervise and Coach (Recruiting, Developing and Retaining Highly Qualified Personnel)
- Create a Shared Vision and Mission
- Develop Your Strategic Plan
- Analyze Data & Monitor and Assess a Thinking Maps Implementation



# TABLE OF CONTENTS: Growing Thinking Schools

Participants Guide: Growing Thinking Schools

## HOW TO USE THIS GUIDE

## PREFACE

## TABLE OF CONTENTS

## STAGES AND STEPS OF THE JOURNEY

### STAGE 1: Getting Started

- Step 1 Who are we together?
- Step 2 Why a “thinking” school?
- Step 3 What is the vision of *Thinking Schools International*?
- Step 4 How are we working together?
- Step 5 What does a “Thinking Student” look like?

### STAGE 2: Exploring Pathways

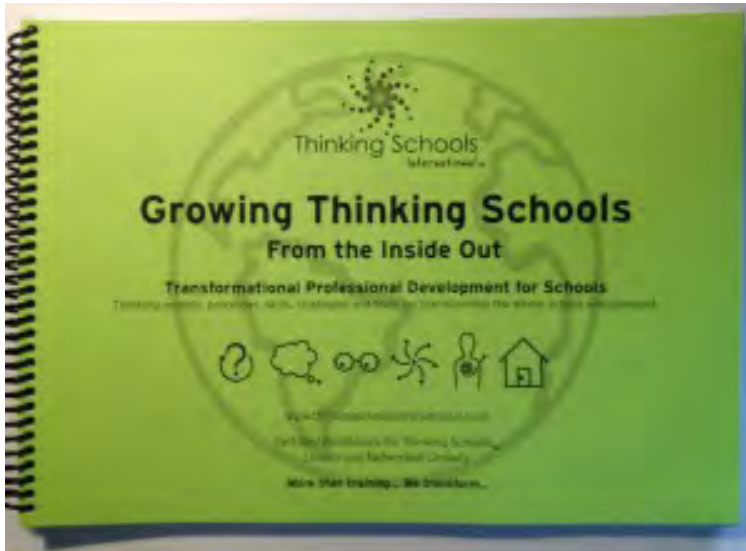
- Step 6 How does “change” happen?
- Step 7 What are some basic pathways to Thinking?
- Step 8 How can we explore these pathways to Thinking?
- Step 9 How do we assess where we are?
- Step 10 At this stage of the journey, what are your priorities?

### STAGE 3: Planning the Journey

- Step 11 How are you going to plan for the journey?
- Step 12 How will the transformative designing process be implemented?
- Step 13 What does a Thinking School look like?

### STAGE 4: Leading the Way

- Step 14 How are we going to build a Transformative Design for Growing a Thinking School?



## Participants Working Field Guide

The Growing Thinking Schools Guide includes an interactive ‘Working Field Guide’ as part of the guide. This section at the end of the guide provides a tool for the leaders to explore their thinking and develop their ideas and plans for implementation.



## **Leadership Training: Thinking Maps, Reflective Questioning, Collegial Coaching, Action Research, Community Building**

### **Why the Same Methods for Leaders**

Thinking Maps, reflective questioning, collegial coaching (collaborative learning), action research and building community are life-long thinking skills. Skills and methods we teach children as learners are the same tools we use as educational leaders to lead whole school staffs.

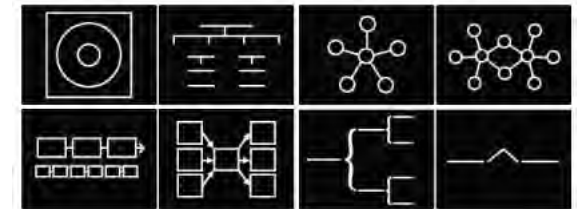
### **Thinking Maps**

Leadership training includes:

- Understand Thinking Maps and Research Connections
- Use Thinking Maps for Communication and Collaboration
- Use Thinking Maps During Professional Learning Communities (PLC) Meetings and for Problem Solving
- Create an Implementation Plan for Sustaining Thinking Maps at Your School (Ongoing Monitoring and Assessing Using a Rubric)

The Thinking Maps are tools for Educational Leaders to:

- Problem Solve
- Facilitate Collaborative Meetings
- Supervise and Coach (Recruiting, Developing and Retaining Highly Qualified Personnel)
- Create a Shared Vision and Mission
- Develop Your Strategic Plan
- Analyze Data
- Monitor and Assess a Thinking Maps Implementation



### **Reflective Questioning**

Leadership training includes how to develop thoughtful interpretive questioning methods to help lead whole school staffs become reflective educators seeking the best learning and thinking methods for the whole learning community.

### **Collegial Coaching**

Educational leaders learn to effectively learn with each other through the collegial coaching model. This method supports growing, learning and mastering the art of teaching (pedagogy) providing students with high quality learning environments.

### **Action Research**

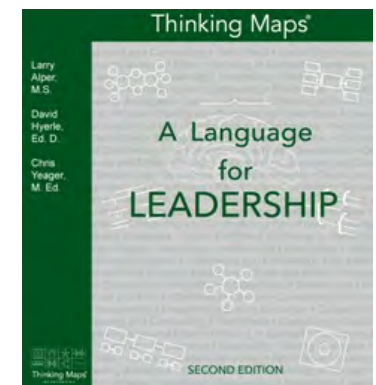
Leadership training learns how action research is a process in which participants examine their own educational practice systematically and carefully, using the techniques of research.

### **Community Building**

Educational leaders learn methods and techniques to develop a collaborative staff (like a high functioning football team) to work together for the whole learning community including the students and educators, and the greater learning community.

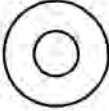
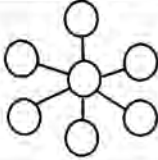
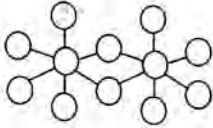
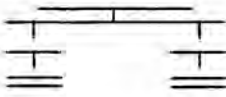
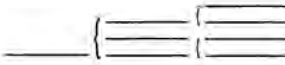
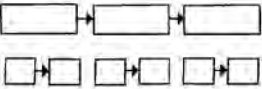
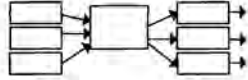

### **Integrative Practices**

The above practices are integrative as a systems approach for whole school transformational change.





# Leadership Training: Thinking Maps, Reflective Questioning, Collegial Coaching, Action Research, Community Building

Essential Leadership Questions	Thinking Processes Facilitated	Thinking Maps as Tools
How are we defining this topic? What is the context? What are our frames of reference which influence our points of view?	<b>DEFINING IN CONTEXT</b>	Circle Map 
Let's describe the topic. Using adjectives and adjective phrases, what are the sensory, logical and emotional attributes present?	<b>DESCRIBING ATTRIBUTES/ QUALITIES</b>	Bubble Map 
Let's compare our ideas. Where are the similarities? and differences? How does the present situation compare to our identified goal?	<b>COMPARING and CONTRASTING</b>	Double Bubble Map 
How could we classify these ideas into groups or categories? What are the main ideas, supporting ideas and details in this information?	<b>CLASSIFYING/ GROUPING IDEAS</b>	Tree Map 
Are there any physical, component parts and subparts that we need to analyze?	<b>PART-WHOLE</b>	Brace Map 
What do we think happened? What is the sequence of events? Let's prioritize our solutions and then create a sequential plan of action.	<b>SEQUENCING</b>	Flow Map 
What are the short- and long-term causes and effects of this event? What are the feedbacks in the system? Given our solution, let's predict what will happen over time.	<b>CAUSE-EFFECT</b>	Multi-Flow Map 
How is this situation related to other experiences we know? What analogy is guiding our thinking?	<b>SEEING ANALOGIES</b>	Bridge Map 

## Frame for Frame of Reference

Thinking is influenced by "frames." Frames are our overlapping personal and cultural experiences, values and belief systems. These multiple background frames give reference to and guide thinking, emotions and judgments. Surfacing our "frames" or **mental models** (Senge) enables us to begin to see what influences the evolving patterns of thinking developed in the maps. We more fully appreciate the human dimension of ideas and the diversity within the organization. Each of the maps is a view of one's cognitive pattern. The Frame represents one's **metacognition**, or reflection on this pattern.

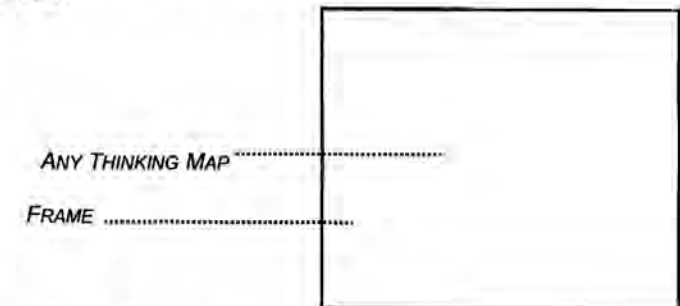
*"Leaders as teachers help people restructure their views of reality and therefore to see new possibilities for shaping the future."*

Peter Senge  
The Fifth Discipline

### The Frame

The Frame is used around any of the eight Maps. After creating a Thinking Map, draw a square "frame" around the map you are using. Within the frame, identify information that shows the influence of background **values, experiences and belief systems** that influence the map you have created. Sharing this Frame with others often enables conversations to evolve from positional to collaborative. Seeing from another person's Frame is much like stepping into their shoes and seeing their thinking from their point of view.

Figure 2-1



### Questioning Using the Frame

Where did you get this information (workshops, books, people, etc.) to support your view?  
 What prior knowledge and experiences influence your view?  
 What are the cultural influences on your perspective (age, gender, ethnic, religious, political, geographic, class, etc.)?  
 What are the belief systems which may influence how you/ others define terms, issues, and/or ideas?  
 What would be the influences, values and beliefs shaping another person's ideas?

## Appendix 3

### Interpretive Questions for Comprehension

*This is an excerpt from Reflective Questions training*

When exploring any type of text (fiction, non-fiction, poetry) it is important to ask interpretive questions that build upon one another. Interpretive questions are effective both with well planned discussions and in spontaneous situations. Interpretive questions stimulate comprehension, oral language, and written language.

#### Types of Questions

Factual - A factual question has only one correct answer.

Interpretive - An interpretive question has more than one answer that can be supported with evidence from the text. Interpretive questions keep discussions going and require the reader to refer back to the text.

Evaluative - An evaluative question asks the reader to decide if s/he agree with the writer's ideas or point of view. The answer to an evaluative question depends on the reader's prior knowledge, experience, and opinions.

#### Writing Interpretive Questions

Well written stories, articles, non-fiction have elements that are interconnected with the various parts supporting one another. An interpretive question can help discover the meaning and relationships between its parts. To start a question include how, what, where, why, and when.

#### Testing the Questions

- There should be genuine doubt about the answer(s) to the question.
- If a question is open to different possible answers students will be more willing to share their thoughts.
- You should have genuine interest in the question. • Students will 'read' your interest (or lack of) in the question and story.
- The question should stimulate discussion. • The question should create an interest in revisiting the story for evidence.
- The question should be clear. • The participants should easily understand the question.
- The question should be specific. • The question should fit the story and not generic to any story

Here are the basic ground rules for leading a discussion:

- 1 - Participants must have read or heard (read aloud) the story.
- 2 - Discussion is focused on the selection everyone has read or heard.
- 3 - Opinions should be supported with evidence from the story.
- 4 - Leaders only ask questions – they do not answer them.

For a discussion based on interpretive questions to be successful, student interest needs to be encouraged and valued.

#### Prepared and Spontaneous Questions

To create effective questions and questioning techniques it is very important to develop and test the questions prior to discussing the story with the class. To facilitate quality questions it is beneficial to take notes when initially reading the story. Writing Interpretive Questions provides a template of the types of notes to help develop quality questions. After writing questions from your notes have another person read the story and try the questions out on them. This will provide an opportunity to test the Testing the Question criteria.

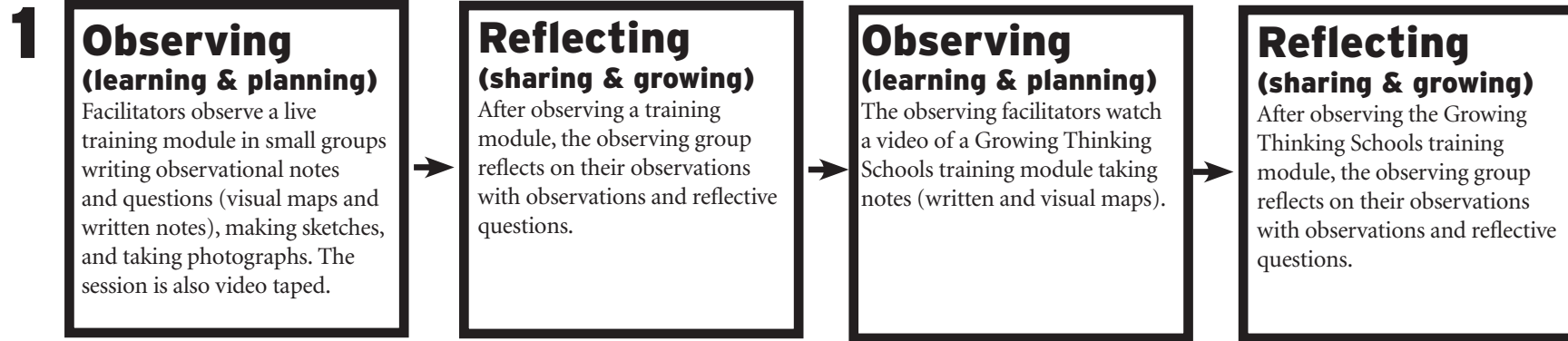
Spontaneous interpretive questions are an important part of all discussions. Experience with preparing questions and using interpretive questioning techniques support spontaneous questioning.

## Collegial Coaching: Facilitators Coaching Facilitators

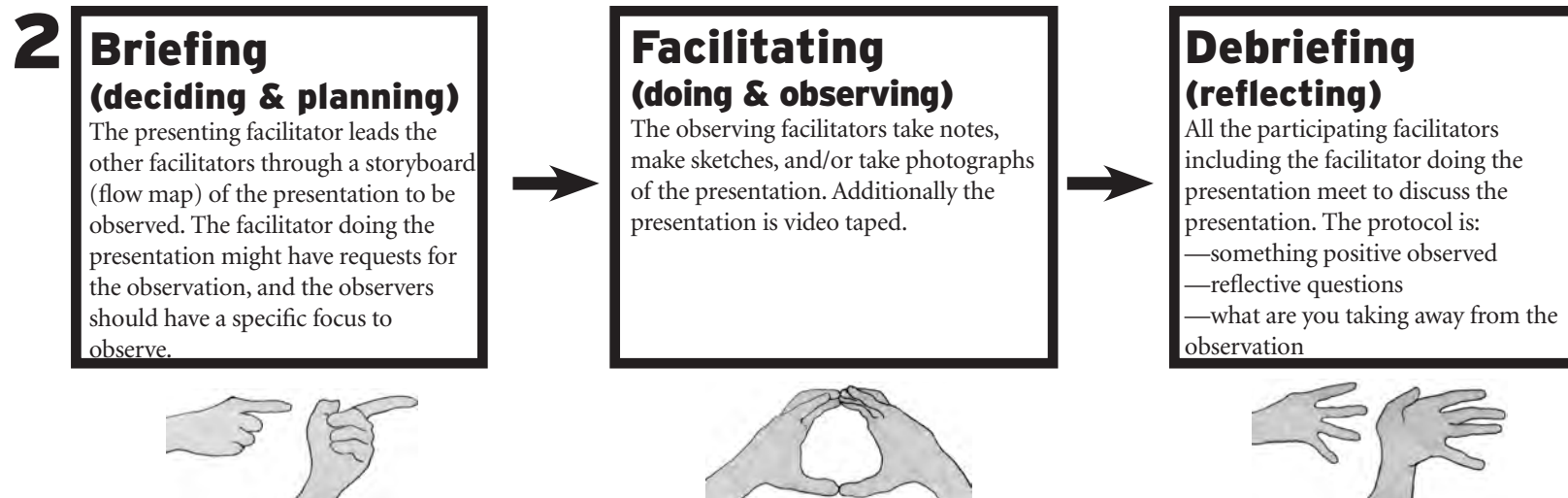
The Facilitators Coaching Facilitators model focuses on facilitators regularly observing each other to learn, understand, and improve their pedagogy (learning & presentation methods). The observed presentations are generally in the 15-40 minute range to provide a focus on particular segment of the Growing Thinking Schools training.

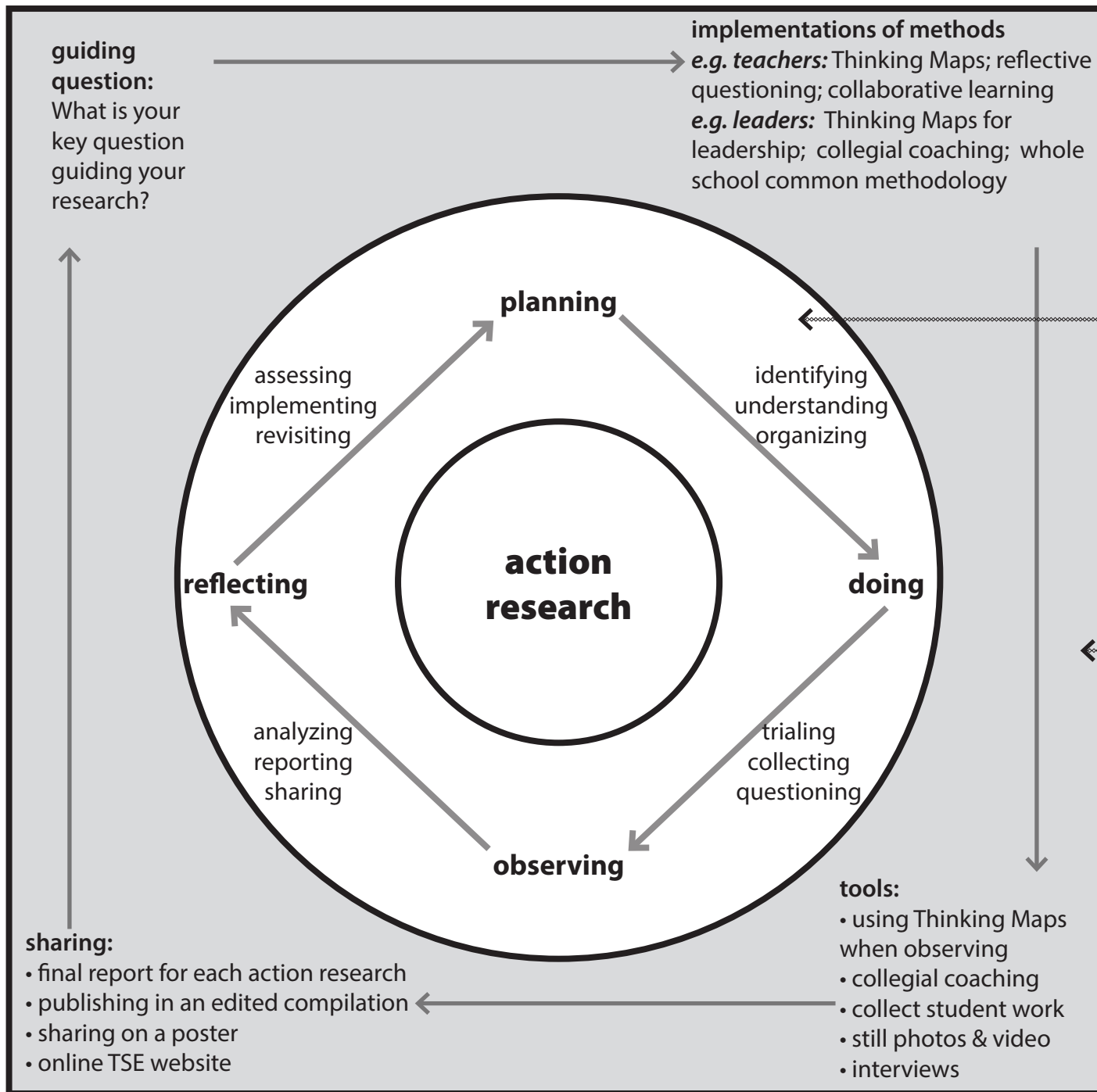
### The Process

#### Observing



#### Doing

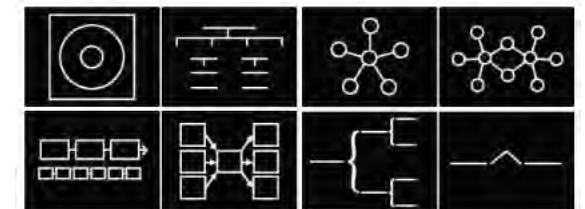




## Participatory Action Research

The action research plan includes the core model (circle) and the actual 'how' in the frame (rectangle).

Thinking Foundation, a supporter of TSE actively funds action research grants globally. [www.thinkingfoundation.org](http://www.thinkingfoundation.org)



Thinking Maps®



## Appendix 4

### Training with AAEB Expert Team – November 2012

"This training is a pilot project (August 2012 training with AAEB expert team), next we'll go to schools (December 2012). We will train teachers and principals. Gradually the program will be at a national level. Let alone your job or other businesses, it helps even in our day to day life [Thinking Schools approach and methods]..."

*Dilamo Otores Ferenje – Head of Addis Ababa Education Bureau (AAEB)*

"An education with a great wide base that may be taken as a good practice that can be scaled up in any places..."

*Addis Ababa Education Bureau expert*

"The training is very good because it goes with the context of our country which has large class sizes..."

*Addis Ababa Education Bureau expert*

"Thinking School training's methodology is related with the teaching and learning process... which helps students to understand things easily..."

*Fesehay Nigusie – Addis Ababa Education Bureau expert*

"I have gained knowledge that students are not only receivers but they can also be active and reflectors... what I am most amazed at is on how to make complicated things easy for students simply..."

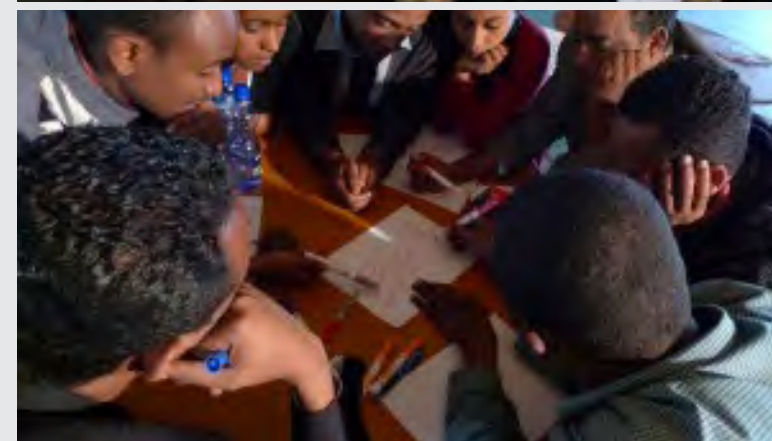
*Thinking Schools Ethiopia – Eminence Social Entrepreneurs*

"Growing Thinking Schools is concerned in transforming schools from traditional methodology to a methodology which involves the thinking process..."

*Atsede Tsehayou – Thinking Schools Ethiopia – Eminence Social Entrepreneurs*

"We are being trained on methods to let the students exploit their potentials"

*Dade Girma – Addis Ababa Education Bureau expert*





"I would like to see this continue in some form. This was a complete success. It would benefit to have this training on an ongoing basis for public school teachers that would assist the whole education system in the country. This was a workshop about changing minds and acquiring a new set of beliefs about what education is all about."

*Awol Endris, Ph.D. ; Program Officer, Education and Training  
UNESCO - International Institute for Capacity Building, Addis Ababa, Ethiopia*

"This thinking process is a day to day activity with each individual [in all classrooms]. When applied in a government school, the people that come from different backgrounds will learn more. This training is very important to be practiced at all levels in government schools across the grades and all subjects. I suggest it is better to select a model school in different regions. In time these techniques will duplicate to all schools in the country."

*Tilahun Teshome - Ministry of Education - Special Needs Programme in Ethiopia Expert  
Daniel Abebe - Ministry of Education - Curriculum Designer*

"It goes without saying that in-service training plays the role of enhancing teachers' competence of effectively imparting lessons. The training, in my view, did constitute an enlightening and capacitating workshop as far as teachers' roles in facilitating and suiting students' learning is concerned. It bore the idea that entitling students [children's] brains to learn of their physical and social environment by its own has in the long run the advantage of shaping independent learning at one's own pace, intellectual capacity and other particular circumstances. It generally is a shift towards making education students' responsibility."

*Dagim Melese - Thinking Schools Ethiopia*

## Thinking Maps Implementation • Addis Ababa Ethiopia • 2013

*Whole School Transformational Design Change • Bikolos Academy (Pre-K, K-12 whole school implementation)*

### Student

**Abdurahemen:** Thinking Maps have helped me a lot in studying. Next year I am taking national exam. I am preparing my summaries using Thinking Maps because it is taking a shorter time with Thinking Maps. It is more effective because by looking at the circles and the other maps, I can remember what is inside and that makes it easier for me to study.

*Abdurahemen Kassim, Grade 9 Student*

### Teacher

**Adefres:** I really want to thank the thinkers who give us Thinking Maps and make us think to ourselves and for our students. Thinking Maps are very helpful. I have spent many years teaching chemistry and I have been trying many methods to visualize chemistry to students. The thinking maps made everything clear in these 2-3 weeks after the training.

*Adefres Zerihun, Vice Director and Chemistry teacher*

### School Leader

**Fatuma:** The first time I took the training was through our school network with around 15 other schools. By then, I was convinced and believed this is the way to quality education. After the training, immediately, I introduced Thinking schools to my school. Now, it is a month since its introduction and within this time I have seen a big change. The students are starting to think clearly and improved creativity as well as creating their own way of thinking and simplifying things.

*Fatuma Ahmed, Founder and School Director*



## From a training of Government School Principals (11 schools in AAEB + 22 schools from other regions) – August 2013

Thinking Schools Ethiopia Facilitator: As you are leaders of different schools, I would like to know how this training was useful for your own work. *Atsede Tseheyer, Thinking Schools Ethiopia Facilitator*

The Training: "What I understand from the two day training was, training can be fun with Thinking maps, experience sharing and reflections." *Wosen Sileshi, Principal*

Collaborative Learning & Whole School Change: "The training was helpful for school administrators too, it helps us to work with our staff collaboratively and come up with new ideas." *Abenet Girma, Principal*

Student Centered for Students — Participant Centered for Teachers and School Leaders: "Starting from the trainers, I have seen how we should treat students and how this will affect their performance and their interest in coming to school." *Zenebe Nigussie, Principal*

Student Prior Knowledge, Thinking Methodologies, Smiles: "Now I understand that students come to school with prior knowledge, how sentence transformation works and various tools to make class room interactive. The other important thing I notice was how powerful it is to welcome students every day and see them off at the end with smile." *Tegegn Shimelash, Principal*

Quality Education for All Children: "The Thinking Maps will assist us in solving our fundamental problems by bringing quality education to all children." *Milkias Bonke, Principal*

Sharing, Spelling, Fluency, Collegial Collaborations: "The main thing I got today is sharing experience from my colleagues and other schools. Secondly, I found different techniques how to teach spelling, fluency, thinking." *Getasetegn Engida, Principal*

Vision: "I can see it in two ways, one: it helps us to see what is available in our schools and outside of our school. Secondly; because previously a lack of teaching methodologies, students performance may be lowered. With thinking methodologies we can give them these tools to support the school team and students." *Abraha Hailemariam, Principal*

Online video of the above interviews may be watched on:

Thinking Schools Ethiopia website: <http://blog.thinkingschoolsethiopia.com/?p=1384>



## Appendix 5

### Criteria for a Thinking School - Becoming Accredited as a Thinking School

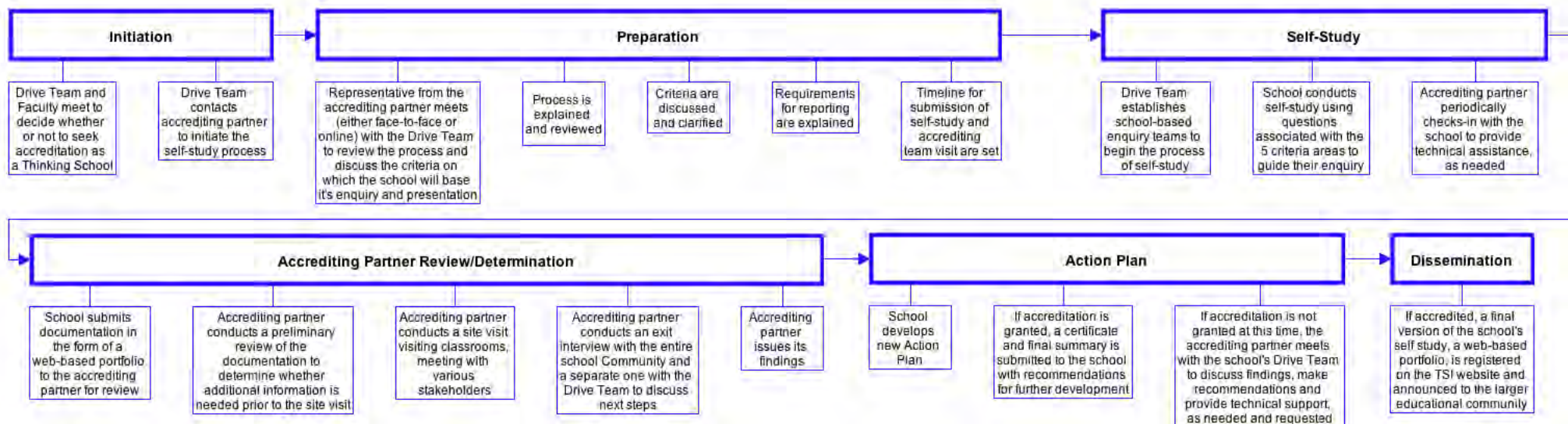
Schools use 5 criteria for developing and reflecting on their own transformative design for the journey towards becoming a Thinking School: Student Centered Thinking, Facilitative Leadership, Integrated Professional Learning, Interactive Assessment, School-Wide Ethos. These 5 basic criteria are used by schools to engage in a process of self-study to assess their progress toward becoming a thinking school. The same 5 criteria are used by an accrediting partner to grant accreditation to schools that have met their own vision and objectives as set forth in their transformative design.

1. **Student Centered Thinking** develops life-long, independent and cooperative learning skills including reflective, critical, and creative thinking and the capacity to solve problems and transform information into meaningful knowledge and action.
2. **Facilitative Leadership** engages all members of the school community in interactions that promote group and individual learning, informed and thoughtful decisions, and a planned, sustained effort toward a common purpose.
3. **Integrated Professional Learning** provides access to planned, connected and diverse opportunities for continuous learning and growth for individuals and groups within the adult school community in the thinking pathways the school has chosen.
4. **Interactive Assessment** is a continuous process of reflection on growth and development to inform both learner and instructional decision-making that engages teachers and learners in a variety of formative and summative approaches.
5. **School-Wide Ethos** reflects the quality of the thought-filled interactions between and among people within the school and the larger educational community and the ways in which all members actively demonstrate respect for each other and the capacity to invite and consider multiple perspectives.

### The Thinking Schools

#### Criteria Process

The accreditation process is an opportunity for schools to engage in a systematic, highly descriptive, enquiry process, whose primary purpose is to use the information they generate to continue to inform, guide, and inspire their ongoing development as a thinking school.





## **Student Centered Thinking**

### **Guiding Criteria:**

- students development as thoughtful, caring, responsible learners is reflected in learning outcomes, attitudes, behavior of pupils, across diverse populations
- a high percentage of students are fluent with skills, tools, and models and use them in an integrated manner
- Is media/technologies are used by students with thinking models to access, process, and communicate ideas

## **Facilitative Leadership**

### **Guiding Criteria:**

- a vibrant and highly effective “Drive Team” reflecting support and involvement from key stakeholders in the school community has been developed and is actively engaged
- a clearly articulated long term plan for the introduction of the models and for their growth beyond the accreditation process has been designed and is being actively followed
- the practices of the leader incorporate the thinking models in coaching and guiding reflective practice and active, purposeful engagement and collaboration, and for promoting thought-filled decision-making

## **Integrated Professional Learning**

### **Guiding Criteria:**

- ongoing, systematic professional learning opportunities are provided to develop and support expertise of the models and to sustain their integrated use over time
- teacher and leader skills and practices grow across a variety of teaching and leading styles, content areas, and cultural backgrounds
- individual and group professional learning opportunities utilize an inquiry approach, incorporate peer-learning, and promote reflective decision-making

## **Interactive Assessment**

### **Guiding Criteria:**

- differentiated forms of both formative and summative assessment are used to inform instructional and learner decision-making
- reflective assessment of thinking is an explicit, regular dimension of everyday
- students, as well as teachers, are actively involved in the assessment processes and opportunities exist for them to use these processes to develop as autonomous learners and teachers

## **School-Wide Ethos**

### **Guiding Criteria:**

- the organizational structure and visual presentation of the school reflects a positive, caring and creative atmosphere representing all stakeholders
- regular opportunities, across roles and responsibilities, are designed for school members to discuss and reflect on the teaching and learning experiences related to the development of a thinking school
- the school actively develops opportunities for collaboration within and beyond the school community, including other schools in the TSI network

### **Reflective Questions:**

- In what ways do our students demonstrate the impact that the thinking models have had on their development as learners?
- To what degree are our students able to use the skills, tools, and models fluently and in an integrated manner?
- How have our students been able to incorporate the thinking models with their use of technology and media?

### **Reflective Questions:**

- What role has the Drive Team played in leading the school through the Thinking Schools process and how have they been able to engage the entire school community?
- How does the plan for developing our school as a thinking school reflect a commitment to this process over time and to what degree is it being effectively used to guide decision-making as we move forward?
- in what ways do the practices of the school leader(s) support and promote reflection, purposeful interactions and thought-filled decision making for both individuals and groups within the school community?

### **Reflective Questions:**

- In what ways does the professional learning plan support the development of expertise in the the thinking models, promote their integrated use, and sustain the work with them over time?
- How is growth in the skillful use of the thinking models being represented in a variety of teaching and learning styles and evident across all content areas and diverse cultural backgrounds?
- In what ways has an inquiry approach been used to engage individuals and groups of people in self-directed and collaborative learning processes to improve instruction and deepen the work with the thinking models?

### **Reflective Questions:**

- How is a variety of assessment strategies, both formative and summative, being used to inform instructional and learner decision-making and to promote the ongoing development of the school as a thinking school?
- In what ways has the assessment of thinking been made an explicit, daily part of the schools approach to teaching and learning?
- How is the use of assessment designed to promote the development of both students and teachers as autonomous, self-reflective learners?

### **Reflective Questions:**

- In what ways does the organizational structure of the school and its visual aesthetic support and promote a positive, caring and creative atmosphere and represent all stakeholders in the process?
- What ongoing formal and informal opportunities have been designed and are actively used by members of the school community across roles and responsibilities to discuss, exchange ideas, and reflect on the teaching and learning experiences related to the development of a thinking school?
- How has the school promoted collaboration within the school and reached beyond itself to connect with the larger educational community, including other schools within the TSI network?

## Appendix 6

### Blended Professional Development: Video, DVD, Internet, Skype Training

In-person training is important in building collaborations. Effective professional development incorporates additional models including the use of video, DVD, Internet and video conferencing (e.g. Skype). The Thinking Schools Ethiopia model includes using videographers to take video of demonstration lessons modeling the use of the various Thinking Schools approaches. The video clips will be edited and used as a library of demonstration lessons, lessons on pedagogy, and other examples with teachers and students using Thinking Schools strategies and methods. Each sub-city will develop a local video library and all the sub-cities will contribute to a greater library for the Addis Ababa Education Bureau to use with Addis Ababa schools, and network regionally, country wide (e.g. with the Ministry of Education) and globally.

Initially under the guidance of Thinking Schools International Global Trainers, and Thinking Schools Ethiopia trainers, models for video and development of DVD's for use by schools will be developed. These models will be used by Thinking Schools Ethiopia trainers, and staff from the Addis Ababa Education Bureau. The media will be accompanied by a brief manual using guiding questions and visual mapping to support teacher training.

#### The model:

There will be two video crews of 2 people. One person will be doing video, the other will be producing and support with any needs for sound. There will be a team of two editors to edit the video taken in the field. They will have a format to follow to assure quality video production - both with regards to content and technical quality. The next step is training the Thinking Schools Ethiopia trainers and the Addis Ababa Education Bureau experts how to use the video in the field with educators. This includes at professional development sessions and for educators to use when the Thinking Schools support is not at the school.

#### People:

- two teams of 2 videographers on each team (4 total) working in the schools. Each video crew will go to at least 20 schools per month. The goal is over two years of implementation all schools will have representation in the video library;
- a team of video editors editing video from the schools for use by trainers and educators;
- one online programmer to post the video clips online for use with international collaborations;
- one producer of the team;
- two directors to facilitate a weekly 15-30 minute television broadcast modeling use of the Thinking Schools methods including video clips from the school;
- one person coordinating and producing video conferencing (skype) sessions with other schools globally
- there will be a total of 11 people working full time during the two year initial phase of the Thinking Schools project creating the video, the video library, DVDs, a TV production and supporting video conferencing.

#### Video Conferencing

The use of video conferencing will assist in the Trainers collaborating with TSI Global Trainers and with other schools globally in the Thinking Schools International world-wide network. The training would happen at specific locations within each sub-city.



## Documenting

The Thinking Schools Ethiopia implementation of whole school change with AAEB schools will be documented through video and print for the purpose of learning, sharing and growing the whole school change. This will be accomplished with the use of video, posters reflecting video and an online website/blog with progress of the initiative.

- video of short documentary films will be made during the initiative to share what Thinking Schools Ethiopia and whole school change are and how it happens. The video will be used at school sites, in presentations to key stakeholders, as part of the professional development, and as a reflective tool for all stakeholders.
- documentary films are used for leadership and teacher training
- posters that share the experiences of the whole school change process. These posters will be developed from interviews and features done on video. They will be used at schools sites to share and learn about school successes
- website and blog using interviews and video to document the TSE-AAEB initiative
- Student Voice and Professional Development for the TSE-AAEB Project where students use the same documenting tools. Their role is to be mentors to other students and model ambassadors for the school.

### Examples:

- poster used with Bikolos Academy in Addis Ababa. This poster was developed from interviews captured on video with teachers, students and leadership.
- video documentary and accompanying handbook that supports the process to initiate and guide schools through a process of transformational change. Please see an online example at [www.thinkingfoundation.org/mom/](http://www.thinkingfoundation.org/mom/)
- website that has been documenting the TSE development in Ethiopia for the past several years: [www.thinkingschoolsethiopia.com](http://www.thinkingschoolsethiopia.com)

## Student Engagement: Student Voice and Professional Development

A group of students at the high school and middle schools will be part of the Student Engagement (SE) professional development for students. Their role is to be mentors to other students and model ambassadors for the school. This will begin with the students mapping (with Thinking Maps) their journey. This will sharpen their use and understanding of the maps while developing a plan for mentoring students and documenting learning outcomes of the maps.

### Some Key Constructs

- initially with High School and Middle School
- mentoring HS to MS as a model to then continue next year with mentoring both with the HS — MS and at the elementary level
- developing case studies of successful rooms
- students cross age peer to peer teaching
- students use video to document their findings
- parent night sharing their experiences and findings



የአዲስ አበባ ከተማ አስተዳደር  
ትምህርት ቢሮ

CITY GOVERNMENT OF  
ADDIS ABABA EDUCATION  
BUREAU

No: 211/2231/2840/13

Date: 25/3/06

Addis Ababa Education Bureau (AAEB)

To: United Nations International Children's Education Fund (UNICEF)

The Addis Ababa Education Bureau (AAEB) writes this letter seeking collaborative funding support for the implementation of the Thinking Schools Ethiopia whole school approach throughout the entire AAEB 300+ government school system. Initial exposure to the Thinking Schools approaches has enabled our bureau to observe, evaluate and subsequently recognize the logical congruence, direct relevance and instrumentality of the key components of the Thinking School training packages in terms of translating the country's educational policy directives into reality and meeting the educational professional and instructional leadership capacity building needs of government school systems of Addis Ababa. The Thinking Schools Ethiopia (TSE) approach embodies the Ethiopian goals of a sustainable student learner centered approach, higher level thinking skills development and applicable academic competencies. TSE core methods are 21<sup>st</sup> century research based thinking skills that work across all disciplines and all grade levels including Pre-K, K-12, colleges and universities. The methods are lifelong problem solving skills for use in school, work, and life.

The implementation of Thinking Schools Ethiopia is built upon the training of the AAEB expert team, the global impact and successes with Thinking Schools International, and the past four years of Thinking Schools Ethiopia work with educators and NGOs in Ethiopia. The TSE methods were introduced to the AAEB expert leadership team with an initial five day learner centered training (Nov 2012) facilitated by a TSI global trainer and TSE Ethiopian facilitators. The AAEB leadership team of experts recognizes through participation and reflections the relevance of the methods as being consistent with Ethiopia's current vision and potential growth with Addis Ababa government schools and ultimately countrywide.

The TSE approach includes leadership training for all school leaders, followed by training with school leadership teams, and then supported with on-site whole school training through professional development with whole school staffs. The goal of TSE is facilitating professional development with highly trained Ethiopian facilitators working in global collaboration with Thinking Schools International. Thinking Schools International and TSE recognize the multi-directional nature of educational change through quality professional development. Multi-directional change is based on the understanding that ideas and innovations occur in all places globally supporting collaborative educational research and development worldwide.

Ongoing assessment and action research are core aspects of the TSI and TSE training model which support the sustainable implementation with the Thinking Schools framework of the six starting points of thinking including:

**Reflective Questioning:** high quality questioning and listening skills

**Thinking Skills:** explicit use of cognitive processes.

**Visual Mapping:** the use of visual tools to map out ideas.

**Collaborative Networking:** between us in pairs, groups, schools, and global networks.

**Developing Dispositions:** characteristics, dispositions, and habits of mind are engaged.

**Structuring Environment:** considering how the physical space is organized and resources used.

Each of these starting points of thinking plays important roles in terms of further advancing thinking skills across all subjects and at all grade levels including colleges and universities as lifelong problem solving skills for work and personal growth.

As part of the assessment process Thinking Schools Ethiopia uses 5 criteria for schools developing and reflecting on their own transformative design for the journey towards becoming a Thinking School: Student Centered Thinking, Facilitative Leadership, Integrated Professional Learning, Interactive Assessment, and School-Wide Ethos. These 5 basic criteria are used by schools to engage in a process of self-study to assess their progress toward becoming a thinking school. The same 5 criteria are used by an accrediting partner (Addis Ababa University in collaboration with global partners) to grant accreditation to schools that have met their own vision and objectives as set forth in their transformative design. Material evidences of reflections on the Thinking Schools approach are accessible at [www.thinkingschoolsethiopia.com](http://www.thinkingschoolsethiopia.com)

This understanding, appreciation and assessment of the importance of Thinking Schools methods from the vantage point of supporting quality education and instructional leadership has the AAEB committed to a collaboration with the Thinking Schools Ethiopia. Therefore, it is in the best interest of AAEB if NGOs, international funders, other private organizations and institutions support and fund quality education for all children through quality educational professional development committing themselves towards helping implement, grow, and ultimately sustain the Thinking Schools approach with AAEB.

Best Regards!



Dilamp Girma  
Head Bureau  
Education Bureau



CC:

- Thinking School International
- -Addis Ababa Education Bureau Head Office
- Educational Quality Management & Institutional Organization Deputy Bureau Head
- Educational Input, Supply & Teaching Learning Deputy Bureau Head
- Teachers & Educational Leadership Development Core Process.
- Study, Plan & Budget Support Process
- Addis Ababa





United Nations  
Educational, Scientific and  
Cultural Organization  
Organisation  
des Nations Unies  
pour l'éducation,  
la science et la culture



International Institute  
for Capacity Building  
in Africa

Institut International  
pour le renforcement des  
capacités en Afrique

Tel: +251 11 5445284 / 5445435  
Fax: +251 11 5514936  
E-mail: [info@unesco-icba.org](mailto:info@unesco-icba.org)  
Website: [www.unesco-icba.org](http://www.unesco-icba.org)  
P.O. Box 2305  
Menlik Avenue, UNECA Compound  
Addis Ababa, Ethiopia

Ref: ICB/DIR/016/12  
Date: 27 January 2012

## To Whom It May Concern

UNESCO International Institute for Capacity Building in Africa (IICBA) has written this Letter of Support to Eminence Social Entrepreneurs, a local non-governmental organisation, for the work it is doing to promote the concept and practice of Thinking Schools Ethiopia.

Thinking Schools Ethiopia aims to promote modern teaching and learning methods in Ethiopian schools through the Thinking Maps Methodology and Whole School System. IICBA, as an Institute engaged in the promotion of modern pedagogy and support to teacher education institutions in Africa, has been participating in the workshops that were organised to familiarise school teachers in Addis Ababa with the methodology of using Thinking Maps and confirms that the new approach to teaching and learning will be very beneficial to students in Ethiopian schools.

As part of Eminence's commitment to "rejuvenating and transforming the delivery of services in Ethiopia", IICBA believes that the Thinking Schools Ethiopia exercise will introduce a new dimension in the way teachers think about teaching and students about learning.

IICBA wishes that the project succeeds in its bid to improve teaching and learning in Ethiopia.

Sincerely,

Arnaldo Nhavoto  
Director  
UNESCO IICBA  
Addis Ababa



# Thinking Maps®: Developing Confident & Competent Thinkers & Learners - Bikolos Nur Academy



Hannan



Abdurahemen



Sabantu



Hussien



## Thinking Maps® for Organizing Thinking

*Bikolos Nur Academy, Addis Abba, Ethiopia Students and Teachers share their reflections on the use of Thinking Maps® as part of Thinking Schools Ethiopia*



### Students

**Hannan:** I really think that Thinking maps make a big difference in my life because before I really didn't read my books much because it takes too much time to understand, but now I am interested to open my exercise books make Thinking Maps to actually study and know what I am reading. We can be independent and learn by ourselves, because Thinking Maps are our teachers. They make everything easy so that we can read and remember — it makes you visualize things. Thinking Maps capture our thinking in our mind.  
*Hannan Abdulfetah, Grade 9 Student*

**Abdurahemen:** Thinking Maps have helped me a lot in studying. Next year I am taking national exam. I am preparing my summaries using Thinking Maps because it is taking a shorter time with Thinking Maps. It is more effective because by looking at the circles and the other maps, I can remember what is inside and that makes it easier for me to study.  
*Abdurahemen Kassim, Grade 9 Student*

**Hussien:** We are using the maps very effectively and the class is now more student centered with everybody participating. The eight Thinking Maps are so helpful because we can do our work easily — for example our book is a huge book so it is tiresome and consumes much time. But you can use a piece of paper and draw maps and easily analyze the things about the subject in few minutes. When we do Thinking Maps in group work everybody is participating on it, so it is going to be fun and interesting.  
*Hussien Abdulhessir, Grade 9 Student*

**Sabantu:** Thinking Maps are very easy to use and to remember. Before when we work in groups there was not much argument but now we can easily visualize things and remember what you see in pictures in the mind. These maps are like pictures and have different designs and very easy to remember.  
*Sabantu Ali, Grade 9 Student*



Adefres



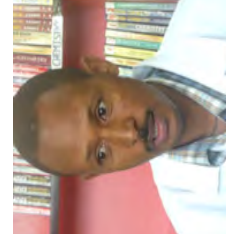
Huda



Mohammed



Usman



Zewdu

### Teachers

**Adefres:** I really want to thank the thinkers who give us Thinking Maps and make us think to ourselves and for our students. Thinking maps are very helpful. I have spent many years teaching chemistry and I have been trying many methods to visualize chemistry to students. The thinking maps made everything clear in these 2-3 weeks after the training.  
*Adefres Zerihun, Vice Director and Chemistry teacher*

**Huda:** Thinking Maps makes our life easier and help us impart lessons which were difficult to comprehend. The students have accepted Thinking Maps in a very special way and related to the maps. I hope the Thinking Maps will go on so that we can give them what they deserve and we can get from you what we deserve.  
*Huda Seid, Vice Director and English teacher*

**Mohammed:** Starting with the Thinking Schools training, I understood that the training and the Thinking Maps is participatory. We were at the training on a Friday and started implementing Thinking Maps on Monday. The training has helped me a lot because before I had hard time delivering my subject to my students. But after learning the Thinking Maps and introducing the eight Thinking Maps to my students, my subject is understood more easily. We are always told about student centered teaching but it is with Thinking Maps I could involve all types of learners in my class. This is also the policy of our country and if we regularly implement them and get reference materials, we can even do better. Both the staff and the students have loved it and we thank you.  
*Mohammed Awol, Social sciences teacher*

**Usman:** I have used all the Thinking Maps except the Bridge Map in my grade 3 lessons. I am very excited. My students love the Thinking Maps and are internalizing the maps. The Thinking Maps are helping us to identify the level of the students. For example, some students remain in the circle map and others apply the other maps achieving higher order thinking in Blooms Taxonomy. So generally I am very happy as the Thinking Maps assists us in effective teaching methodology and students. Recent results have shown slight increment of growth from last quarter over a period of three weeks.  
*Usman Mohammed, Grade 3 Science Teacher*

**Zewdu:** Thinking Schools Ethiopia is very interesting starting from the training. The Thinking Maps makes our minds visualize information. In this short time students are referring to and using the Thinking Maps more than the previous methods. All students are more active than the previously because they can easily understand the topics and remember what they are learning.  
*Zewdu Hailu, Vice Director and Physics teacher*



Thinking Schools  
International

Thinking Schools International  
[www.thinkingschoolsinternational.com](http://www.thinkingschoolsinternational.com)

Thinking Schools Ethiopia  
[www.thinkingschoolsethiopia.com](http://www.thinkingschoolsethiopia.com)



Thinking Foundation

[www.thinkingfoundation.org](http://www.thinkingfoundation.org)