# Academic Youth Development (AYD)
# IMPLEMENTATION GUIDE

*Strengthening* Academic Identities.
*Enhancing* Classroom Participation.
*Raising* Achievement.

# 6th EDITION

A project of the Charles A. Dana Center
at The University of Texas at Austin and Agile Mind, Inc.

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## About This Guide

This guide is for district and campus leaders to use in planning a successful enactment of Academic Youth Development (AYD). It contains a brief overview of the program and step-by-step implementation guidance and checklists. The appendices provide selected communication and recruitment tools, materials, and technology specifications.

A password-protected page on the Charles A. Dana Center website—www.utdanacenter.org/academicyouth— includes additional resources, such as slideshow presentations to generate awareness about the program, research findings from an internal evaluation of AYD, and citations for selected research from which the program draws. These implementation resources—in particular, the communication and recruitment tools—will also be useful to parents and students.

In addition to the Agile Mind and Charles A. Dana Center websites, the **Learning and the Adolescent Mind** site (www.learningandtheadolescentmind.org) provides an overview of the foundational research that has informed the development of AYD. It shares with parents and educators the most compelling knowledge about student learning and success through the ideas and the research of the most respected leaders and emerging thinkers in the fields of psychology and adolescent education. It also provides resources for parents and educators to engage in these ideas through professional development and self study.

A collaboration of the
**Charles A. Dana Center at The University of Texas at Austin** and **Agile Mind, Inc.**

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## Program Vision and Structure

Studies show that the more mathematics courses students take, and the more rigorous the course material and instruction are the more likely students are to succeed in postsecondary education and the contemporary workplace. For too long, however, insufficient resources and a lack of educational equity have limited our vision of students' potential, in mathematics, in science, and in high school.

When students believe in their ability to learn, and when they are armed with effective problem-solving strategies, they work harder, persist longer, and achieve at higher levels. Further, when educators believe in students' ability to learn, they can engage entire classes in more rigorous tasks that challenge students to demonstrate their understanding in multiple ways.

**Academic Youth Development (AYD)** is a research-based program, based on new knowledge emerging from the psychological and other learning sciences, that strengthens students' academic identities, enhances their classroom participation, and raises their achievement. The Charles A. Dana Center at The University of Texas developed the AYD program collaboratively with psychologists, teachers, school district leaders, and the staff of Agile Mind, piloting and refining the program in a diverse array of districts.

AYD encompasses both established and emerging research on student motivation, effort, and learning—as well as powerful knowledge on the malleability of intelligence—and is designed to increase the number and diversity of students who succeed and persist in STEM courses and in high school. Participating teachers and students enact the engaging online- and offline-program curriculum in a classroom setting.

AYD gives students and teachers an explicit set of tools and strategies for applying new ideas in daily learning. Student learning is enhanced through rich instructional materials and problem-solving experiences in which learners solidify their understanding of the youth development ideas and develop the skills of academically successful students, such as the ability to productively persist in challenging tasks. Resources include:

- Interactive animations that deepen understanding of key concepts
- Advice to help teachers plan and implement
- Embedded formative assessments that help teachers gauge progress and shape instruction

AYD is for teachers and leaders who seek powerful ways to meet the demands of new and rigorous standards and who want to update and enhance their school improvement efforts. Research and our experience demonstrate that, to be effective, efforts to improve academic outcomes must address both students and the overall culture of the learning environment. Research also demonstrates that relatively modest interventions aimed at shaping the culture of classrooms can have powerful effects on student success.

AYD serves whole schools and districts. Participating students develop knowledge and skills to share with and to model for their peers, thus becoming change agents in improving the learning culture and outcomes. Teachers and administrators are equipped with powerful research, insights, and strategies to shape their practice with all of the students they serve.

The demands in classrooms and school systems have changed. AYD is designed to empower students and teachers so that they are equipped to meet these new challenges.

# Program Vision and Structure

## Students change

AYD transforms the way adolescents think about themselves as learners—and thereby improves their academic engagement and achievement. AYD incorporates ideas from social and cognitive psychology regarding effective effort, attribution of effort, and the significance to academic success of interpersonal skills, sense of belonging, and motivation.

Central to the AYD program is helping students understand that intelligence is *malleable*, not *fixed*. AYD draws on neuroscience research to show students how their brains physically change as they learn. One of the program's key strategies is to transform AYD students into individuals who contribute to creating and maintaining a positive learning environment for themselves and their fellow students. The program, implemented with fidelity, will:

- Build positive, persistent academic identities among students
- Increase the capacity of individuals and systems for teaching to rigorous standards
- Build a classroom culture that fosters respectful engagement in academics
- Create dramatic improvements in student achievement

## Teachers change

Participating teachers tell us that AYD transforms their beliefs about the potential of each student, changing the way they approach their students and their teaching practices. Teachers who participate in AYD experience powerful introductions to AYD's portfolio of psychological concepts and strategies and are equipped with tools to introduce them to students. As teachers learn more about key AYD concepts, their ideas about students' ability to succeed change, as do the strategies they employ to engage all learners. Many participating teachers also report significant changes in their satisfaction as a result of the program.

## Classrooms change

AYD goes beyond individual students and transforms classroom engagement. It does so by creating student leaders with skills and information to share with their peers, thus improving the learning culture—and outcomes. The program gives students and teachers an explicit set of tools and strategies for applying new ideas in daily learning. In addition to providing social and cognitive learning curricula, AYD builds critical thinking skills with learning activities that center on logical reasoning and problem solving in mathematics and across the curriculum.

## Results change

Independent evaluations of AYD have documented significant achievement gains in middle and high school mathematics, with particularly strong gains among low-income and minority students. In Cupertino, California, fewer than 10 percent of AYD students repeated Algebra I, compared with 24 percent of non-AYD students. Similarly, in Evanston, Illinois, AYD students achieved a 12-point increase on the state assessment, and fully 85 percent met the district's growth target, while non-AYD students recorded just a 6-point increase on the assessment. These are just two examples of the results districts can see with AYD.

# Program Vision and Structure

## Forms of the program

The programs in Agile Mind's AYD family share common foundations in the latest research on student motivation, engagement, and learning, and each program is designed to increase the number and diversity of students who succeed in STEM courses and in high school. With these common foundations and outcomes, the resources, structures, and design of each program are tailored to meet the specific needs of its intended audience.

To serve learners and educators in ways that most meet their needs, the AYD program has three forms: Summer-Start and School-Year AYD, encompassing curriculum for students coupled with face-to-face and curriculum-embedded professional development for their teachers, and An Educator's Course in AYD, encompassing professional development for teachers, counselors, and administrators.

### Summer-Start AYD (SS-AYD)

Summer-Start AYD typically serves students entering Algebra I who are at or near grade level in mathematics. In addition to the social and cognitive learning content, students investigate problem solving, proportionality, and the use of multiple representations—connecting what they know with what they will be expected to master in Algebra I. The mathematics tasks and activities give students opportunities to "try on" the ideas and apply the strategies they learn from the youth development curriculum. This helps educators ensure that students entering Algebra I are successful the very first time— redrawing the existing success curve, in which nearly half of American students fail Algebra I at least once.

According to Rand Corporation[1] and other studies, the break from academics during summer results in a learning loss that leaves students significantly behind when they return to school in the fall. Summer learning programs can stem this learning loss—particularly among underserved and urban student populations.

***Summer-Start AYD has two major components:***

**Summer**
The summer component is 3 weeks (14 class days), 4.5 hours a day, and is taught by two AYD teachers who are likely to teach Algebra I to AYD students in the fall. While intensive, it is structured as a low-risk environment—without tests or grades—in which participants experience teaching and learning in a relaxed setting that promotes strong gains in achievement.

**Academic year**
During the academic year, teachers and students reengage with key AYD concepts, using a toolkit of activities aligned to their Algebra I syllabus. They cement their learning from summer to Algebra I and further develop skills of productive persistence.

### School-Year AYD (SY-AYD)

School-Year AYD serves students in 8th, 9th, or 10th grade during the academic year. It can be used for all students in a variety of school structures, such as established advisory, study skills, or homeroom sessions, freshman orientation periods, or after-school programs.

The program supports 60 hours of instruction, with 40 hours of core curricula on the psychological concepts and 20 hours of problem-solving experiences in which the psychological ideas and strategies are applied. The materials are structured into approximately 80 lessons, designed for delivery in 30-45 minute instructional blocks.

School-Year AYD offers students the opportunity to study social and cognitive learning curricula, as well as build critical thinking skills, with engaging experiences that center on logical reasoning and problem solving in mathematics and other areas. Some of the problems support algebraic thinking—a historic area of need.

The program's rapid cycle of learning, practice, application, and reflection enables students to develop and apply new learning strategies in all their classes. This is consistent with research that shows that students are most successful when they are prompted and rewarded for seeking opportunities to apply their new learning in a range of academic settings. The design of the program enables students to develop action steps for becoming more powerful, effective learners.

Districts implementing School-Year AYD should have structures in place to support regular meetings (from twice per week to daily) to give students ample opportunity to learn, apply, and reflect on the AYD ideas and strategies.

[1] McCombs, J.S., Augustine, C.H., Schwartz, H.L., Bodilly, S.J., McInnis, B., Lichter, D.S., Cross, A.B., "Making Summer Count: How Summer Programs Can Boost Children's Learning." Santa Monica, CA: RAND Corporation, 2011.

# Program Vision and Structure

## An Educator's Course in Academic Youth Development (E-AYD)

Educators' beliefs about the malleability of student intelligence and persistence, and the context and culture of the learning environment, have all been linked to student success. Changing teachers' beliefs on these constructs and the ways in which they incorporate the constructs into practice have the potential to dramatically affect student success and the culture of school systems that serve them.

An Educator's Course in AYD is for educators who are interested in learning about the research and the strategies that are most crucial to student learning and achievement. The course begins with a 6-hour in-person seminar where participants explore ideas and strategies that have the power to transform students' attitudes and behaviors, teachers' attitudes and practices, and education systems. The course continues with 9 additional hours of online self study and facilitated online community work over a period of 6 weeks. Educators' experiences in this course are enhanced through a curriculum that contains interactive animations and simulations of key concepts, rich instructional materials, select reference documents, and participation in an online learning community.

The course minimum for participating systems is 25 educators, and participants can earn 15 hours of CPE credits through The University of Texas at Austin upon course completion.

## Research and evaluation

The Dana Center conducts continuous program evaluation to improve the program and implementation strategies. In this case, *evaluation* refers to evaluation of the program and its implementation—not of the students and teachers participating in the program.

There are three main components to the current AYD research and program evaluation:

- A formative study on how attitudes and beliefs around teaching and learning change for both teachers and students as participants in AYD

- An investigation of how these attitudes and beliefs are related to participants' use of the AYD resources

- An investigation of how participating in the Summer-Start AYD program affects mathematics achievement

Some AYD sites will be invited to take part in an in-depth process of observations and interviews. In return for districts' commitment and participation, the Dana Center will provide briefings on the overall results of the research, as well as a customized analysis of data collected from participating districts.

To learn about our research findings, review the AYD Program and Research Update on the AYD page of the Charles A. Dana Center website: www.utdanacenter.org/academicyouth.

# What Is Your Commitment?

Our research and the experiences of our partner schools make clear that the program is highly effective in schools and districts that enact it with fidelity.

## Designated leadership team

AYD can impact teachers and students most dramatically when districts build a team that shares the responsibility for ensuring successful implementation. These individuals, whose responsibilities are detailed in this guide, work together to support and enact AYD, including planning for implementation, supporting teachers and students, monitoring progress, and measuring outcomes.

## Access to web-based curriculum

In all forms of AYD, the curriculum is delivered through Agile Mind's online learning management system. Teachers and students must have access to these resources for the duration of the school year to complete the program.

## Commitment to professional development

Only through professional development can teachers learn the key ideas and strategies that have the greatest influence on student learning and achievement. To facilitate change in students and classroom culture, leadership teams and AYD teachers must internalize these new and emerging skills and knowledge. Their professional development experiences around AYD, from the first exposure to the ideas to ongoing exploration and self study, enable them to support students as they learn about themselves as strategic thinkers and forge new academic identities.

## Appropriate district/school structures

School-Year AYD and Summer-Start AYD each have specific structures that must be in place to enact:

- Summer-Start AYD requires established summer-school structures that support three consecutive weeks for the summer component.

- School-Year AYD requires an established in-school structure that meets at least twice per week for 30-45 minutes, such as advisory, study skills, homeroom, or after-school sessions.

- An Educator's Course in AYD requires participants to attend a full day of in-person professional development, as well as to commit to completing three modules of self study and online learning community work.

Our work with partners has identified additional implementation structures that support an effective enactment of Summer-Start AYD and School-Year AYD. These are described on the following pages with an overview of the structures, details about the structures, and an implementation checklist that leadership can use to track the progress of their preparation and enactment.

For districts enacting both of the student programs, there are significant economies of operation and of scale. Agile Mind's professional services and support team work closely with these partners to support coordination.

## Implementing Summer-Start AYD: Checklist

| Structure | Current status/ Completion date | Responsible party/ Communication strategies | Additional notes |
|---|---|---|---|
| **Prepare for implementation** | | | |
| ❑ Identify key personnel and generate awareness | | | |
| ❑ Recruit teachers | | | |
| ❑ Register for and attend Agile Mind professional development | | | |
| ❑ Recruit students | | | |
| **Plan and enact the summer component** | | | |
| ❑ Plan location, dates, materials, and transportation | | | |
| ❑ Send student rosters to Agile Mind | | | |
| ❑ Schedule teacher planning time | | | |
| ❑ Enact the summer component | | | |
| **Plan and enact during the school year** | | | |
| ❑ Schedule AYD students into the Algebra I classes of their summer AYD teachers | | | |
| ❑ Schedule and enact the school-year kickoff event | | | |
| ❑ Integrate AYD concepts and strategies into Algebra I classes | | | |
| ❑ Attend Agile Mind Advisor sessions | | | |
| ❑ Schedule and enact school-year gatherings (optional) | | | |

# Implementing Summer-Start AYD: Details

## Prepare for implementation

Because the success of any program depends on fidelity of implementation, it is very important to prepare by putting structures in place.

❑ **Identify key personnel and generate awareness**

The leadership team that supports the enactment of AYD is crucial to the program's success. Identify AYD coordinators at both the district and campus levels. It is recommended that the team include an influential administrator on each campus where the program is being enacted.

**District-level coordinator:**

- Participates in an initial Implementation Call to set the stage for successful enactment
- Coordinates budget and logistics with all relevant campus-level staff
- Ensures that teachers have adequate planning time for enactment of a new program
- Determines how the district will collect data on the AYD program's impact on changes in student engagement and achievement
- Determines dates and locations for the summer component
- Coordinates materials, printing, transportation, and snacks for all campuses

**High school campus coordinator for each participating high school:**

- Participates in an initial Implementation Call to set the stage for successful enactment
- Recruits appropriate teachers
- Ensures that teachers attend professional development
- Coordinates student recruitment
- Ensures that Summer-Start AYD students are scheduled into AYD teachers' algebra classes

Identify one **feeder school coordinator for each feeder campus**—typically an assistant principal or 8th grade counselor:

- Attends a leadership briefing to set the stage for a successful implementation
- Generates awareness among middle school teachers and counselors
- Monitors student recruitment
- Coordinates parent and student awareness materials and applications with 8th grade teachers and counselors

It is important to generate awareness among staff at feeder schools and high schools, including administrators, counselors, mathematics department chairs, algebra teachers, 8th-grade teachers, and technology coordinators. Student assemblies and parent nights help build enthusiasm.

See the communication and recruitment tools at the back of this guide and on a password-protected page of the Dana Center website—www.utdanacenter.org/academicyouth—for materials for generating awareness, including a slide show for staff.

As you prepare to implement AYD, your district and campus leaders may attend leadership briefings—whether in person, by phone, or in webinars—to ensure that your questions are answered about practices that lead to successful implementation. Invitations are sent by e-mail, or you may contact Agile Mind directly for additional information. Call toll free: **1-866-284-4655, extension 1** (Partner Services).

# Implementing Summer-Start AYD: Details

❑ **Recruit teachers**

Some teachers are more likely than others to help students engage in the ideas that are essential to the program's effectiveness.

• Exhibit—or have the potential to form—good working relationships with students

• Will hold high expectations for their students' achievement

• Will share and reinforce AYD concepts and strategies with students throughout the school year

• Exhibit a good working knowledge of mathematical problem solving

AYD teachers are expected to:

• Co-plan and co-teach the 3-week (14 class days) summer component of AYD

• Participate in a school-year kickoff event

• Participate in professional development during the spring/summer and during the school year

• Integrate AYD ideas and strategies into the Algebra I classroom, using the AYD Academic-Year Toolkit

❑ **Register for and attend Agile Mind professional development**

Each spring and summer, Agile Mind hosts 2.5-day professional development institutes for teachers and other key school personnel, such as principals and counselors. Successful partner districts report that leadership attendance at these institutes is key to success. As part of this institute's orientation, participants are given access to the program materials.

The institutes prepare teachers to enact this unique curriculum. The professional development also familiarizes teachers with AYD's key problem-solving experiences and its youth-development content—information on motivation, theories of intelligence, brain anatomy, communication skills, and goal setting. In addition, teachers plan in the company of peers. Those who have taught AYD before have opportunities to explore the content and strategies in new ways and to refine their implementations.

Register early for the best choice of dates and locations—institutes are typically available in multiple locations around the country, but fill quickly.

> To register, call Agile Mind toll free: **1-866-284-4655, extension 1** (Partner Services).

❑ **Recruit students**

Recruit students who can benefit from additional support—and who can influence others to create a positive and productive classroom environment. Identifying and recruiting truly influential students is key to AYD's effectiveness. These students extend the benefits of the program to *all* students taking Algebra I in the fall.

Students who are typically a good fit for AYD:

• Have regular attendance in middle school

• Are at or near grade level in mathematics performance

• Are enrolled in Algebra I for the upcoming school year

• Have potential to be an effective leader and role model in the classroom

# Implementing Summer-Start AYD: Details

Don't confuse *influence* with *popularity*. Influential students in AYD are not necessarily the academic elite or the most popular students. They are not necessarily the best-behaved students.

Rather, the influential students are those whom other students admire or emulate; they lead by example within their own social group or bridge one or more groups. They have the credibility to inspire other students. When they do something, other students pay attention and emulate them, sometimes in their manner of dress, sometimes in behavior or speech.

Site coordinators should involve teachers and counselors from each feeder school in the process of selecting students. See this guide's communication and recruitment tools for a sample letter to middle school teachers and counselors.

We recommend over-recruiting. For example, as you create a list of potential Summer-Start AYD students, identify twice the number you hope to serve.

**Student recruitment events** are a crucial step in a successful implementation. If AYD is new to the community, students and families may hesitate to dedicate three weeks of their summer to it. We therefore recommend scheduling recruitment visits or parent nights to increase students'—and their families'—interest in the program. Use the slide show for students and families (on a password-protected page available via the Dana Center website—www.utdanacenter.org/academicyouth).

You can also use such events to clarify key messages about AYD. For example:

- Some students equate summer school with punishment or an indication that they need special help. AYD is not a remedial program.

- It is an honor for students to be selected to participate, and they are chosen based on the recommendation of their teachers and counselor.

- AYD is a year-long program. The summer experience combines mathematical problem solving with new knowledge and skills that can be used in every class.

Though not a program requirement, incentives can boost student attendance and commitment to the program. If developed sufficiently early in your implementation, you can promote these incentives during recruitment and as part of any recruitment visits or parent nights.

Suggested incentives include:

- Offer students pass/fail course credit (local elective) that is based on attendance and active class participation. (This practice is strongly recommended by our experienced partners.) Successful AYD districts have tied course credit to active participation during the summer component.

- Extend the summer enactment by one day. Arrange for guest speakers, and, if possible, schedule related field trips—for example, invite or visit forensic scientists, members of crime scene units from the local police or sheriff's department, or experts in brain science—to reinforce AYD activities and concepts.

- Provide other tangible rewards, such as graphing calculators, T-shirts, an end-of-program party, or certificates of completion.

# Implementing Summer-Start AYD: Details

## Plan and enact the summer component

As you launch Summer-Start AYD, sketch out initial plans for both the summer *and* the school year. This long-range planning helps you anticipate problems and ensure success.

❑ **Plan location, dates, materials, and student transportation**

The summer component is 3 weeks (14 class days), 4.5 hours a day. The AYD curriculum provides activities for 4 hours of instructional time each day during the summer. We recommend scheduling 4.5 hours a day to allow for two or three short breaks.

Summer enactment requires a classroom with Internet access, a computer, and an LCD projector, as well as access to a computer lab or laptops. AYD requires that students—individually and in pairs—use computers for half of each day in summer. The rest of the time, students work in pairs or small groups in a regular classroom setting. For more detail on technology requirements go to www.agilemind.com/system_requirements.html.

Obtaining and preparing materials to enact the summer component includes printing copies of Student Activity Sheets (available for free from the online AYD course system). For a detailed list of other materials needed for summer, see the materials list on page 26. Some districts offer snacks during summer enactment.

Participating students may need transportation (school buses or public transit passes) to and from the summer location.

❑ **Send student rosters to Agile Mind**

Send rosters to Agile Mind to obtain student login IDs and passwords. Email **support@agilemind.com** or call **1-866-284-4655, extension 1** (Partner Services).

❑ **Schedule teacher planning time**

The AYD summer component is team-taught by two teachers for each class of up to 30 students, and teachers need time to plan how they will share responsibility for enacting the program. Schedule one to two days of planning prior to the summer enactment and daily planning time during the summer enactment.

❑ **Enact the summer component** in 3 consecutive weeks (14 class days, 4.5 hours a day).

# Implementing Summer-Start AYD: Details

## Plan and enact during the school year

To realize all the benefits of Summer-Start AYD, participating districts must complete enactment of the program during the school year. This entails scheduling students, maintaining awareness of the program, and using the Academic-Year Toolkit to integrate AYD strategies in Algebra I classes.

❑ **Schedule AYD students into the Algebra I classes of their summer AYD teachers**

Students and teachers who share the intensive summer experience together benefit from continuing to work together to reinforce the AYD ideas in Algebra I. Placing AYD students into the classes of their summer teachers ensures that is achieved.

❑ **Schedule and enact a school-year kickoff event**

Schedule a kickoff event for August (or September for late-opening schools) as part of teacher in-service days before the school year officially starts.

A kickoff event helps generate and sustain awareness of the AYD program among your entire staff—and enlists their support for the program.

We recommend inviting:

- AYD students and teachers
- Other "receiving" teachers—those Algebra I teachers who did not teach the summer AYD component but will have AYD students in their fall classes
- Campus and district leaders
- Other mathematics teachers and entire staff, if possible

Suggested activities:

- Introduce or review the AYD program (a slide show for staff is available on a password-protected page available via the Dana Center website—www.utdanacenter.org/academicyouth).
- Remind participants of AYD's background and its research. Use the slide show for staff or the open-access website (see Appendix A).
- Share what to expect from AYD students during the year.
- Share ideas about how to incorporate AYD into the campus mathematics program.
- Solicit and examine classroom strategies that incorporate AYD ideas. Citations for research that informs AYD are available at www.utdanacenter.org/academicyouth.
- Ask Summer-Start AYD students to share their summer experiences.

❑ **Integrate AYD concepts and strategies into Algebra I classes**

AYD teachers meet to plan roles for their student allies during the school year and how to conveniently promote and reinforce AYD strategies with all students.

Teachers plan their use of the online Algebra I AYD Toolkit—which has resources to be used in Algebra I classrooms—with their students. Teachers use these resources throughout the academic year.

## Implementing Summer-Start AYD: Details

❑ **Attend Agile Mind Advisor sessions**

AYD Advisor sessions support districts' school-year implementations, including sustaining the momentum of the program, strengthening the messages and core concepts of AYD, and increasing the likelihood of dissemination of AYD concepts to all students within schools.

❑ **Schedule and enact school-year gatherings (optional)**

Some districts hold monthly meetings for AYD teachers and students over the course of the school year. These gatherings should be included in the school calendar and can be brown-bag lunches, before- or after-school sessions, or sessions during a flexible period in the day such as an advisory period or study hall.

School-year gatherings provide a forum for students to continue to support each other as a learning community. The gatherings offer an opportunity for students to reconnect while revisiting and refining the strategies they learned—and the learning goals they set for themselves—during the summer component. All resource materials and activities are included in the online AYD curriculum.

## Implementing School-Year AYD: Checklist

| Structure | Current status/ Completion date | Responsible party/ Communication strategies | Additional notes |
|---|---|---|---|
| **Prepare for implementation** | | | |
| ❑ Identify key personnel and generate awareness | | | |
| ❑ Identify participating teachers | | | |
| ❑ Register for and attend Agile Mind professional development | | | |
| **Plan and enact during the school year** | | | |
| ❑ Schedule students and teachers into appropriate class structure | | | |
| ❑ Plan to enact the curriculum | | | |
| ❑ Send student rosters to Agile Mind | | | |
| ❑ Teach the curriculum | | | |
| ❑ Attend Agile Mind Advisor sessions | | | |

# Implementing School-Year AYD: Details

## Prepare for implementation

Because the success of any program depends on fidelity of implementation, it is very important to prepare by putting structures in place.

❑ **Identify key personnel and generate awareness**

The leadership team that supports the enactment of AYD is crucial to the program's success. Identify AYD coordinators at both the district and campus levels. It is recommended that the team include an influential administrator on each campus where the program is being enacted.

**District-level coordinator:**

•   Participates in an initial Implementation Call to set the stage for successful enactment

•   Coordinates budget and logistics with all relevant campus-level staff

•   Ensures that teachers have adequate planning time for enactment of a new program

•   Determines how the district will collect data on the AYD program's impact on changes in student engagement and achievement

**Campus coordinators for each participating school:**

•   Participate in an initial Implementation Call to set the stage for successful enactment

•   Identify appropriate teachers

•   Ensure that teachers attend professional development

•   Coordinate student identification for School-Year AYD

As you prepare to implement AYD, your district and campus leaders may attend leadership briefings—whether in person, by phone, or in webinars—to ensure that your questions are answered about practices that lead to successful implementation. Invitations are sent by e-mail, or you may contact Agile Mind directly for additional information. Call toll free: **1-866-284-4655, extension 1** (Partner Services).

❑ **Identify participating teachers**

Some teachers are more likely than others to help students engage in the ideas that are central to the program's effectiveness. Select teachers who:

•   Exhibit—or have the potential to form—good working relationships with students

•   Will hold high expectations for their students' achievement

•   Will share and reinforce AYD concepts and strategies with students throughout the school year

•   Exhibit a good working knowledge of mathematical problem solving

AYD teachers will:

•   Plan and teach the School-Year AYD curriculum

•   Encourage students to apply the AYD ideas and strategies in all of their classes

•   Support students' reflection on and refinement of AYD knowledge and skills

•   Attend professional development during the spring/summer and the school year

# Implementing School-Year AYD: Details

❑ **Register for and attend Agile Mind professional development**

Each spring and summer, Agile Mind hosts 2.5-day professional development institutes for teachers and other key school personnel, such as principals and counselors. Successful partner districts report that leadership attendance at these institutes is key to success. During the institute, participants receive access to the program materials.

The institutes prepare teachers of School-Year AYD to enact this unique curriculum. The professional development also familiarizes teachers with AYD's key problem-solving experiences and its youth development content—information on motivation, theories of intelligence, brain anatomy, communication skills, and goal setting. In addition, teachers plan in the company of peers. Those who have taught AYD before have opportunities to explore the content and strategies in new ways and to refine their implementations.

Register early for the best choice of dates and locations—institutes are typically available in multiple locations around the country but fill quickly.

> **To register, call Agile Mind toll free: 1-866-284-4655, extension 1** (Partner Services).

# Implementing School-Year AYD: Details

## Plan and enact during the school year

School-Year AYD is enacted within established district structures, such as advisory or study skills periods, extended homeroom, ongoing freshman orientation, and after-school programs.

❑ **Schedule students and teachers into appropriate class structure**

Students who will take School-Year AYD and teachers who have been selected to teach it and who have attended professional development must be scheduled into the course. Partners have found the greatest success when class meetings occur at least twice per week.

❑ **Plan to enact the curriculum**

As the school year begins, provide teachers with time to plan curriculum enactment. They should have opportunities to refresh their learning from professional development, to collaborate with other School-Year AYD teachers in the school or district, and to set the stage for a successful experience for students.

❑ **Send student rosters to Agile Mind**

Send rosters to Agile Mind to obtain student login IDs and passwords. Email **support@agilemind.com** or call **1-866-284-4655, extension 1** (Partner Services).

❑ **Teach the curriculum**

In regular, 30-45 minute blocks of instruction, students experience a rapid cycle of learning, application, reflection, and refinement of key youth development concepts and problem-solving skills to enhance achievement.

A crucial part of the program is developing students' ability and willingness to apply their new knowledge and skills to all their classes. With curricular support, teachers facilitate students' application of their learning throughout the program to all of their classes.

❑ **Attend Agile Mind Advisor sessions**

AYD Advisor sessions support districts' school-year implementations, including sustaining the momentum of the program, strengthening the messages and core concepts of AYD, and increasing the likelihood of dissemination of AYD concepts to all students within schools.

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As you implement AYD in your district or school, please let us know your ideas for improving the implementation process and this guide. Contact us with questions and suggestions at **support@agilemind.com**.

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## Implementing An Educator's Course in AYD: Checklist

| Structure | Current status/ Completion date | Responsible party/ Communication strategies | Additional notes |
|---|---|---|---|
| **Prepare for implementation** | | | |
| ❑ Identify key personnel and generate awareness | | | |
| ❑ Identify participating teachers/staff | | | |
| ❑ Ensure participant registration and membership in the online community | | | |
| ❑ Ensure participant attendance | | | |
| **Support a culture of learning** | | | |
| ❑ Set expectations for self study and online community participation | | | |
| ❑ Monitor online community participation | | | |
| ❑ Monitor impact on district and classroom practices | | | |
| ❑ Distribute certificates of completion | | | |
| ❑ Promote a culture of learning across your district/school | | | |

# Implementing An Educator's Course in AYD: Details

An Educator's Course in AYD (E-AYD) is an adult professional development course, developed by Agile Mind, Inc. and the Charles A. Dana Center at The University of Texas at Austin, for educators who are interested in learning about the research and the strategies that are most crucial to student learning and achievement. Participants can earn up to 15 hours of continuing professional education (CPE) credit through the Charles A. Dana Center upon course completion. The course minimum for participating entities is 25 educators.

The course begins with a 6-hour in-person session, led by a Dana Center or Agile Mind facilitator, where participants explore ideas and strategies that have the power to transform students' beliefs and behaviors, educators' attitudes and practices, and education systems. Participants engage with the program content and collaborate to consider the emerging research and to explore strategies to put the research into practice.

Over the subsequent 6 weeks, the course continues with approximately 9 additional hours of self study and participation in a facilitated online learning community.

## Prepare for implementation

❑ **Identify key personnel and generate awareness**

A strong leadership team is crucial to the enactment of E-AYD strategies in your school/district. Strong leadership can ensure that participants apply learning from their professional development experience to their roles as educators. Districts have found that a Project Lead is essential to sustaining the momentum of the program. A Project Lead and other key personnel should participate in an Implementation Call with Agile Mind to walk through the steps of implementation and to identify a date for the in-person session.

❑ **Identify participating teachers/staff**

Leadership should select participants for the course and inform them about the course and its intent. E-AYD participants are responsible for applying their learning from the course to their role in your school/district to transform the culture. Some are more likely than others to embrace these ideas and to bring them to other staff and to students. Select participants who:

- Exhibit—or have the potential to form—good working relationships with students
- Will hold high expectations for their peers and students
- Will collaborate with peers to coordinate the implementation of E-AYD strategies with students
- Will share and reinforce E-AYD concepts and strategies throughout the school year

❑ **Ensure participant registration and membership in the online community**

Agile Mind Partner Services will work closely with school/district leadership to ensure participants have all the necessary information to register and join the online community. Participants should join the online community *prior* to the in-person seminar. Pre-registration enables the seminar time to be highly focused on course content and collaborative work.

❑ **Ensure participant attendance**

The in-person session is a full day of professional development. All registered participants should attend the session.

# Implementing An Educator's Course in AYD: Details

## Support a culture of learning

An Educator's Course in AYD introduces powerful ideas from the psychological and learning sciences to change attitudes, beliefs, and behaviors in positive ways. These new ideas and strategies have the greatest and most enduring effect when they are promoted and supported with a strong culture of learning.

The self-study portion of E-AYD—and its focus on application of E-AYD ideas and strategies by educators—can be a powerful way to introduce or strengthen a culture of learning.

❑ **Set expectations for self study and online community participation**

Participants who attend the in-person seminar will have completed 6 hours of the course. To benefit fully from the course and to receive a 15-hour CPE certificate, participants must complete the self study and online community work. School/district leadership should set clear expectations for consistent participation during the self-study portion of the course.

❑ **Monitor online community participation**

Participants are responsible for posting in the online community responses to question prompts for the self-study research topics. Facilitated by an expert from Agile Mind or the Charles A. Dana Center, the online community is intended to extend and deepen participants' knowledge and understanding of the key ideas and to enrich their application of these ideas in your school/district. Leadership should confirm and promote participation and application of new ideas and strategies.

❑ **Assess impact on district and classroom practices**

Regardless of their role, educator participants in E-AYD apply new ideas to their work in your school/district. Leadership support for participants' learning can have transformative effects on classrooms and schools. Through the online community and subsequent school/classroom interactions, leadership can stay apprised of educators' plans for applying new ideas and assess the impact on educator practices.

❑ **Distribute certificates of completion**

Participants earn certificates of completion for their work in E-AYD. The Charles A. Dana Center will send certificates to the Project Lead for distribution to individual course participants.

❑ **Promote a positive learning culture across your school/district**

Current research indicates that the culture of learning is shaped by many factors, including the attitudes and beliefs of students and educators, classroom interactions, available resources, and the specific instructional practices employed by teachers. There are many things educators and school systems can do to promote a strong culture of learning, within classrooms and school wide:

- Encourage, expect, and require authentic collaboration among the adults in the system
- Model, encourage, and expect student participation and active engagement
- Set high expectations for all students while providing appropriate social and academic supports
- Promote a sense of belonging among students by encouraging and recognizing diverse expressions of competence and expertise

## Implementing An Educator's Course in AYD: Details

Agile Mind and the Dana Center are partners in your implementation. We are here to support you every step of the way. If you have questions about the course content or participation in the online community, please contact your Agile Mind or Dana Center facilitator.

If you have technical questions, or a facilitator has not yet been assigned, please contact Agile Mind Partner Services at (866) 284-4655 or support@agilemind.com.

# Appendix A: Summer-Start AYD Communication and Recruitment Tools

To support your enactment of Summer-Start AYD, Agile Mind and the Charles A. Dana Center provide numerous resources, both online and in print.

For ease of use, the following materials from this guide are also on a password-protected page available via the AYD section of the Dana Center website: www.utdanacenter.org/academicyouth.

*Implementation tools*

This AYD Implementation Guide (pdf)

*Materials for school staff*

Summer-Start AYD: Sample letter to middle school teachers and counselors (editable Microsoft® Word file)

*Materials for students and their families*

Summer-Start Academic Youth Development: Information for Students (editable Microsoft Word file, available in English and Spanish)

Summer-Start Academic Youth Development: Student Application (editable Microsoft Word file)

Summer-Start Academic Youth Development: Sample acceptance letter for students (editable Microsoft Word file)

**Additional resources available only on the Charles A. Dana Center website**

These resources—particularly the slide show presentations—can also help you implement AYD. While they are not included in the print version of this guide, they are available at www.utdanacenter.org/academicyouth.

The slide show presentations are on the password-protected page; the research summary and FAQ, as well as the reference lists, are publicly available.

*Slide show presentations*

Academic Youth Development: An introduction for staff (pdf of PowerPoint™ presentation)

Academic Youth Development: An introduction for students and their families (pdf of PowerPoint presentation)

*References for some of the academic research that informs AYD*

Reference List (pdf)

Annotated Bibliography (pdf)

> This document is available as an editable Microsoft Word file on a password-protected page available via the Dana Center website—www.utdanacenter.org/academicyouth.

## Summer Start-AYD: Sample letter to feeder schools

Dear Colleague:

As you may know, | insert name | High School/Middle School offers a unique program: Summer-Start Academic Youth Development (AYD). One purpose of this program is support students in their transition to Algebra I. The AYD strategy is to develop student allies who can work with teachers to create positive classroom cultures for teaching and learning.

The program begins with a three-week summer immersion experience, to be held | insert dates |. Participating students will gain the knowledge and skills they need to change their conceptions of themselves—and of their capabilities—as learners. The AYD program has two strands: mathematics and youth development. AYD continues during the school year with curriculum enacted in the algebra classroom, which ties the AYD strategies directly to the algebra syllabus.

- The mathematics content focuses on problem solving and on using multiple representations to solve problems in a way that builds on prior learning to develop in the AYD students a strong foundation that will prepare them for what they will experience in their first year of algebra.

- The youth development content focuses on effective effort—that is, it emphasizes that hard work pays off—and on developing thinking and communication skills that support learning both as an individual and as a member of a community of learners.

To this end, we need your help identifying students who could benefit from the program—and who have the potential to influence their peers through their actions. Identifying truly influential students will greatly increase the effectiveness of AYD, enabling it to extend its effects beyond the students who participate in the summer program to all the students taking Algebra I in the fall.

Please consider these key criteria when nominating for AYD influential students from the current class who will enter Algebra I in the fall. The potential AYD student:

- Has regular attendance in middle school
- Is at or near grade level in mathematics achievement
- Is enrolled in Algebra I for the upcoming school year
- Has clear potential to be an effective leader and role model in the classroom

> A note about student capability to influence others: It's easy to confuse *influence* with *popularity*. Who are the influential students? They are not necessarily the academic elite or the most popular. They are also not necessarily the best-behaved students. Rather, the influential students are those whom other students admire or emulate; they are the students who lead by example within their own social group or who bridge one or more groups. They have the credibility and charisma to inspire other students.

Once you have identified students to nominate, please give each a copy of the attached student application.

Each student should complete and return the application form by | insert date | to the office of | insert name |. If you have any questions about this process or the student application form, please contact | insert name | at | insert contact information |. Final selection of students to participate in the summer program will be made by | insert date |.

Thank you for your help in nominating students to participate in this new program.

Sincerely, | Insert name, title, affiliation, and signature |

> This document is available as an editable Microsoft Word file on a password-protected page available via the Dana Center website—www.utdanacenter.org/academicyouth.

# Summer-Start Academic Youth Development (AYD): Information for Students

## What Is Summer-Start AYD?

It's an exciting program that will help you get the skills you need for success in Algebra I and in high school. If selected to participate, you will take part in a program encompassing a three-week summer class and curriculum embedded in your algebra class during the school year. You will:

- Learn to use mathematical clues in forensics science and crime scene investigations.
- Increase your math skills with new online tools that you can use at school and at home.
- Learn about what it takes to be a successful learner, even when assignments are hard or you are taking challenging courses.
- Learn mathematics that will give you a jump start in Algebra I.
- Meet your Algebra I teacher and many of your new classmates.
- Become part of a learning community that can support you throughout your school year.

## Who can participate?

Any student entering Algebra I who can commit to attending the summer class can apply. Pick up an application from your math teacher or counselor.

## Frequently asked questions

- **Why would I give up three weeks of my summer?**

  This program gives you the opportunity to get to know your school and your Algebra I teacher in advance. You will learn skills that can become keys to your success in high school—and beyond.

- **Is this a remedial class?**

  This class is the opposite of remedial. In this class, you will work with classmates to solve challenging and interesting problems and get a jump start on Algebra I. It is an honor to be selected to participate.

- **What if I don't really like math?**

  That's OK. Our most successful students started out feeling the same. Many students who don't like math have reported that they liked AYD because the activities didn't feel like the math they were used to and taught problem-solving strategies that apply to many other subjects. Also, you will usually work in pairs or groups. Learning to work as part of a team can lead to success!

- **Is this just a math class?**

  Though you will spend some time each day involved in mathematical problem solving, this is not a typical math class. In fact, some students report that it doesn't feel like a math class at all. Instead, this is a class that helps you learn a wide variety of skills that you can use in any class.

This document is available as an editable Microsoft Word file on a password-protected page available via the Dana Center website—www.utdanacenter.org/academicyouth.

## Summer-Start Academic Youth Development: Student Application

**Deadline to apply:** _____

### What is Academic Youth Development?

AYD is a fun and exciting program for students entering Algebra I that will help you get the skills you need for success. If selected to participate, you will take part in a three-week summer class full of games and activities that will help you to become a better learner, and during the school year you will reconnect with the ideas and with other AYD students. The program has mathematical problem solving mixed with a whole new set of skills that can be used in all your high school classes. Some things you will do in the summer class include:

- Meet your Algebra I teacher and many of your new classmates.
- Learn about what it takes to be a successful learner, even when assignments are hard or you are taking challenging courses.
- Learn mathematics that will give you a jump start in Algebra I.
- Become part of a learning community that can support and guide you throughout Algebra I.
- Engage in forensics science and interesting problem solving that will increase your confidence in mathematics and in school.

### Who can participate?

To participate, students should apply and be recommended by their middle school mathematics teachers. Students must also be able to commit to attending the three-week summer class. It is an honor to be selected to participate. **This year's AYD summer class will be held:**

**When:** _____ **Where:** _____

| | |
|---|---|
| **Student name:** | |
| **Name of current school:** | **Name of current math teacher:** |
| **Name of parent or guardian:** | **Phone number and/or email address of parent or guardian:** |
| **Student: Please describe why you are interested in the AYD program. If needed, use the back or a separate page.** | |
| **Signature of parent or legal guardian (and date signed)** | **Signature of student (and date signed)** |

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# Appendix B: AYD Materials List

Technology (required):

- Computer with projection device and Internet connection for daily use. For more detail, see the **Agile Mind technology specifications.**
- Access to a computer lab or laptops for selected days of the program

Consumables (for a group of 30 students):

- 1 copy of AYD Student Activity Sheets for each student (from the online materials)
- 2 rolls of masking tape
- 8 to 10 sets of chart markers, with 2 to 4 colors per set
- 15 sticky note pads
- 15 pairs of scissors
- Flip chart paper, preferably with a 1-inch grid
- 8-10 small balls or beanbags for tossing
- 60 medium-sized balloons
- About 30 yards of ribbon
- 30 ounces of modeling clay or play dough
- 200 pipe cleaners in assorted colors
- About 200 sheets of grid paper for graphing
- 8-10 flexible measuring tapes labeled in cm (ideally up to 200 cm) or meter sticks
- 1 box of flat toothpicks
- 40 gallon-sized zipper-closure bags
- About 200 sheets of photocopy paper in 2 colors: 100 sheets of each (optional)
- 1 class set of calculators (that is, one calculator per student or pair of students); graphing calculators recommended but not required
- Folders or binders (one per student)
- Optional: 8-10 Towers of Hanoi games (each game contains 3 pegs with 5 rings of different sizes)
- Optional: computer speakers

Materials exclusive to Summer-Start AYD:

- 3 or 4 examples of patterns clipped from newspapers or magazines (try to get patterns represented variously in pictures, graphs, and tables)
- Optional: 1 to 2 video cameras/tripods to be used when students read their letters

Materials exclusive to School-Year AYD:

- 1 package of dry spaghetti (14-16 oz)
- 1 bag of miniature marshmallows (14-16 oz)

# Appendix C: Technology Specifications

Agile Mind services are delivered in an application service provider (ASP) model, meaning that they are web-based services operating from a central data center. All content is accessed through the Agile Mind learning management system and delivered via the Agile Mind Internet servers.

Students and educators access the online services via personal computers at a minimum connection speed of 56 kbps using standard Internet browsers.

By sharing the technology specifications with your school's or district's technology coordinator, you ensure that the computers planned for use in the program meet the technical requirements to successfully run the online services and take advantage of their full functionality. It is best to test access to—and the functioning of—the program materials on the computers that students will use, to ensure that all the correct support software is installed.

For the most up-to-date technology specifications and requirements, please visit: www.agilemind.com/system_requirements.html.

## About the development of Academic Youth Development

The Charles A. Dana Center—collaborating with psychologists, learning scientists, classroom teachers, education leaders, and education company Agile Mind, Inc.—has developed Academic Youth Development to transform the way adolescents think about themselves as learners, and thereby their academic achievement and persistence.

## About the Charles A. Dana Center at The University of Texas at Austin

The Charles A. Dana Center develops and scales math and science education innovations to support educators, administrators, and policy makers in creating seamless transitions throughout the K–14 system for all students, especially those who have historically been underserved. Thus, we work to ensure that every student leaves school prepared for success in postsecondary education and the contemporary workplace—and for active participation in our modern democracy.

We are committed to ensuring that the accident of where a student attends school does not limit the academic opportunities he or she can pursue. Thus, we advocate for high academic standards, and we collaborate with local partners to build the capacity of education systems to ensure that all students can master the content described in these standards.

Our portfolio of initiatives, grounded in research and more than 20 years of experience, centers on mathematics and science education from prekindergarten through the early years of college. We focus in particular on strategies for improving student engagement, motivation, persistence, and achievement.

## About Agile Mind

**Agile Mind** is committed to enhancing equity and high achievement in mathematics and science in our nation's middle and high schools. Founded in 2002, the company works in collaboration with leading educators to develop comprehensive programs, tools, and services that enable educators and education systems to support rigorous instructional experiences for all students. In addition to Academic Youth Development, Agile Mind offers comprehensive programs—encompassing, under one umbrella, job-embedded professional development, curricula, formative assessment, and data analytics and reporting—for middle school mathematics through AP® Calculus and Statistics, as well as high school Biology.

## Catalyst for Change

*"AYD was the catalyst to a district-wide conversation about changing classroom practice to reflect a growth mind-set. It was the voices of our AYD students—and their success in algebra and other classes—that helped convince us that we needed to begin to influence beliefs and practices throughout the district."*

—*Kate Jamentz, Ed.D., Academic Deputy Superintendent, Fremont Union High School District*
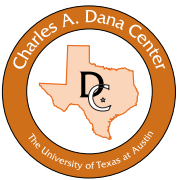
*Strengthening* Academic Identities.
*Enhancing* Classroom Participation.
*Raising* Achievement.

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