

THE

F O U R



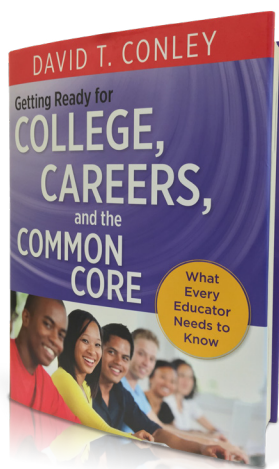
REFERENCE GUIDE

KEYS

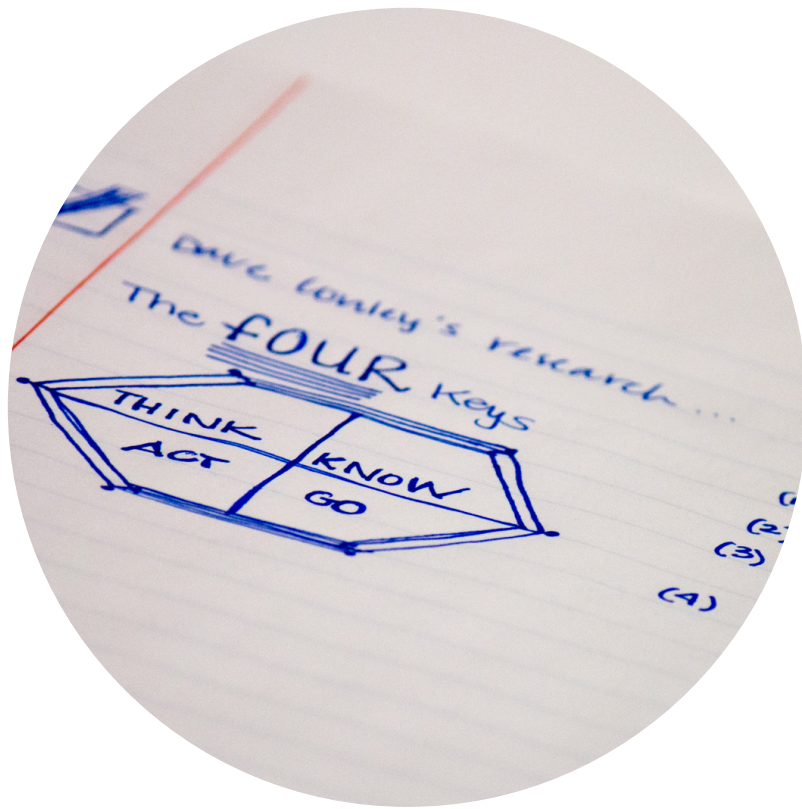
Introduction

Many educators, families, and students are taking a hard look at the current educational system in the United States and finding there is a significant gap between what *is* and what *ought to be* if we want our country to succeed in the 21st century. The Four Keys to College and Career Readiness (the Four Keys) provides a framework and common language to use as we work to close this gap by developing systems that support all students as they prepare for the future.

Based on over a decade of research and 20 years of experience in the public education system, Dr. David T. Conley developed the Four Keys so students, families, and educators can identify and prioritize the skills that are needed to be successful after high school. In its simplest form, we refer to the Four Keys as THINK, KNOW, ACT, and GO. In order to prepare students to be lifelong learners, they need the ability to THINK deeply about what they are doing; KNOW contextually why they learn; ACT purposefully to achieve their goals; and GO successfully through life's transitions.

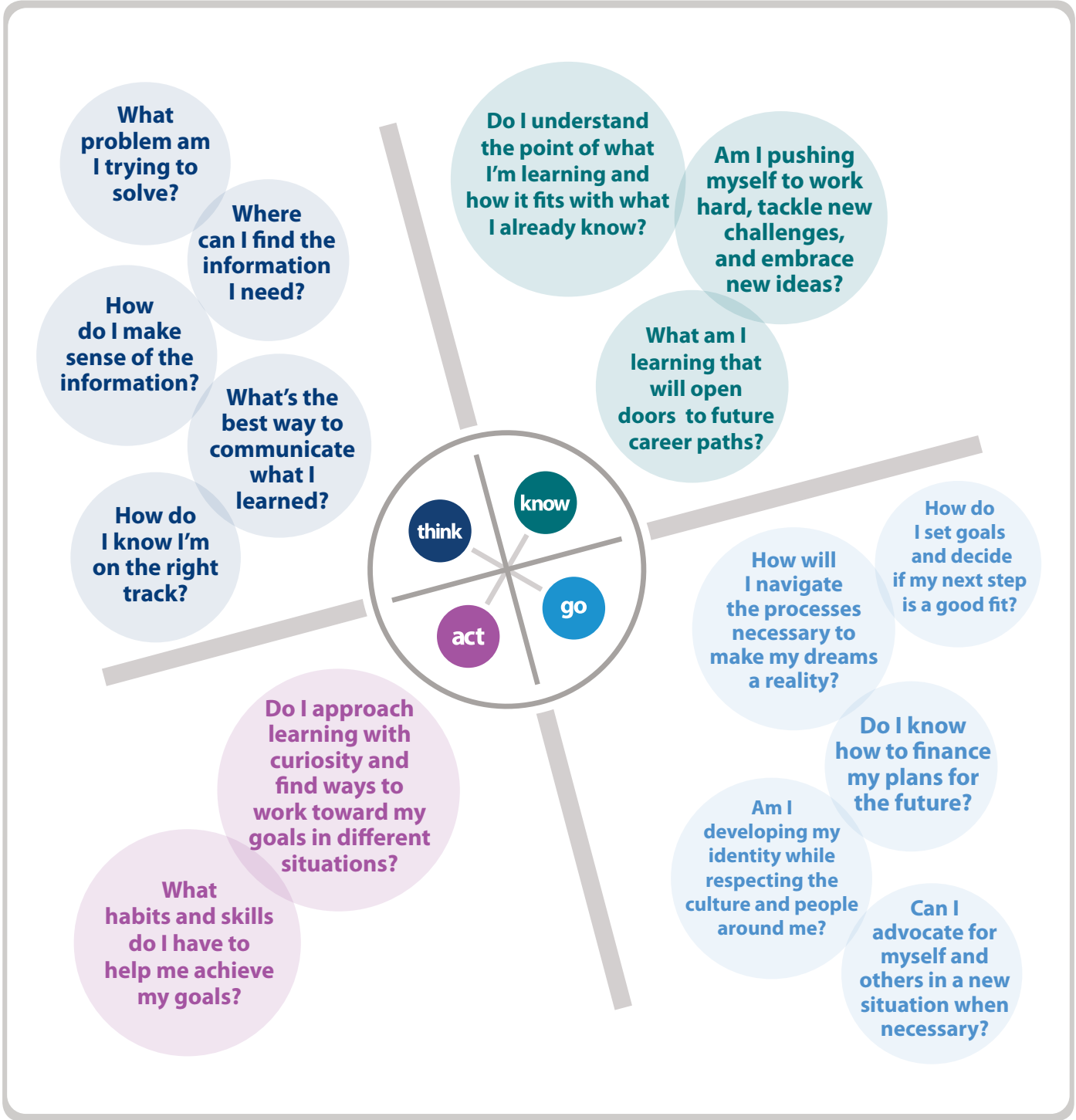


For more information about the research and the elements included in the Four Keys, read Dr. Conley's latest book ***Getting Ready for College, Careers, and the Common Core.***



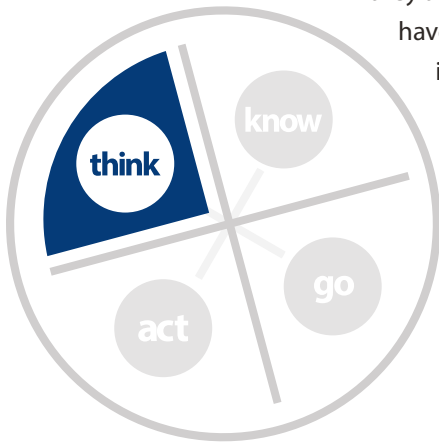
ASKING THE RIGHT QUESTIONS

Using the questions on the next page, we can begin to support students as they navigate pathways that are increasingly complex in their educations, careers, and personal lives. The Four Keys are not a linear process, but instead should be thought of as a set of skills and strategies that can be used to better understand how we learn, as well as a framework for approaching new concepts and situations we encounter as we interact with the world around us.



Think

What does it mean for a student to think deeply about what and how he or she is learning? Similar to the scientific method, we lay out a set of strategies that are typically used by effective problem solvers. As stated in *Getting Ready for College, Careers, and the Common Core*, students “need to know how to think in particular ways about the content they are learning. They need to be able to do more than retain or apply information; they have to process and manipulate it, assemble it and reassemble it, examine it, question it, look for patterns in it, organize it, and present it.”



By asking and answering a series of questions when approaching new learning situations, students can more effectively determine solutions to the challenges they are faced with. Called the *Key Cognitive Strategies* in Dr. Conley’s book, we have simplified the language so students, families, and educators can regularly use these questions to guide students’ thinking. These questions are:

- *What problem am I trying to solve?*
- *Where can I find the information I need?*
- *How do I make sense of the information?*
- *What’s the best way to communicate what I learned?*
- *How do I know I’m on the right track?*

As students develop strategies to address these questions, they will obtain the skills needed to creatively and innovatively solve challenges they encounter in their education after high school, in their careers, and in their day-to-day life. Not only will students gain these important skills, but they will also understand why and how these strategies help them approach new challenges in an organized way– they will know how to problem solve and they will understand why these problem solving strategies are effective.



“These strategies are applied throughout the learning process and can be thought of as revolving around the notion of inquiry, of thinking more deeply about what one is learning, of formulating ideas, seeking information, reflecting on findings to generate conclusions, reporting these results in a variety of ways based on the nature of the subject area, and doing all of this with the precision and accuracy required of the subject area and the specific problem or issue being addressed.”

– Dr. David Conley
Getting Ready for College, Career, and the Common Core

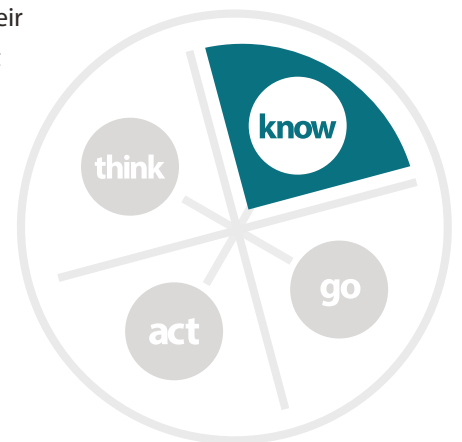
Know

Within the THINK, KNOW, ACT, GO framework, KNOW has historically been the most emphasized in the U.S. education system with a focus on teaching and testing students' specific academic knowledge such as English and mathematics. This focus on content without systematically teaching the other skills and techniques needed to be a successful learner has created a system with a skewed definition of what student success looks like. While students certainly need foundational knowledge to succeed after high school, those foundations will only be useful if they have the ability to contextualize their knowledge and understand how and when to use it. This is why within the Four Keys framework KNOW is only one quarter of the model.

With rapid changes to the global economy and immediate access to information, the workforce of the 21st century will not be able to absorb and retain all the knowledge needed to succeed in their careers, but will instead need to know how to continually learn important concepts and facts effectively and efficiently. Once again, taking the research and details Dr. Conley describes in his latest book as *Key Content Knowledge*, we have developed a series of questions to prompt students to continually reflect on why, what, and how they are learning new content:

- *Do I understand the point of what I'm learning and how it fits with what I already know?*
- *Am I pushing myself to work hard, tackle new challenges, and embrace new ideas?*
- *What am I learning that will open doors to future career paths?*

As students use these questions to connect what they are learning to their future, their time in the classroom can become something that feels more relevant instead of just something they are required to do. Adults who support student learning should make it a habit to examine the way information is communicated to students. Are students being taught in a way that allows them to ask these questions each day? Are subjects within a school taught so that students see the connections between them? Is the content taught being explicitly connected to how and when it is needed in specific careers and/or industries? And maybe most importantly, are students regularly given the opportunity to learn based on their own curiosity and interests?



"It is not enough to have students learn high-quality content knowledge, even when that knowledge is carefully organized, structured, and presented clearly. Understanding student explanations of how they learn content knowledge is as important as the content itself they are being asked to learn."

– Dr. David Conley

Getting Ready for College, Career, and the Common Core

Act



Employers consistently say that skills and competencies such as the ones described in ACT are just as important– if not more important – than the specific qualifications and skills employees need to do their jobs. To more explicitly link the knowledge and skills students need to their potential future career paths, we recently reviewed desired employee competencies from an organization internationally renowned for its innovative design, and mapped them to the Four Keys. A large portion of these competencies were skills that fit within the ACT quadrant. Examples of the ACT-aligned competencies included the abilities to: be proactive in seeking information; be organized; be goal-oriented; collaborate often; and be able to embrace diversity of people, ideas, and cultures.

Based on what Dr. Conley has identified as *Key Learning Skills and Techniques*, we ask two questions that effective learners should consider as they navigate their college and career pathways:

- *Do I approach learning with curiosity and find ways to work towards my goals in different situations?*
- *What habits and skills do I have to help me achieve my goals?*

When the skills and techniques students need to “own” their learning and to accomplish goals are consistently incorporated with content taught in the classroom, students are able to better identify answers to these questions, particularly if they are given ways to monitor their progress in gaining and/or refining these skills. At the same time, it is also important for educators and families to help students identify how they acquire these skills through their life experiences outside of the classroom. Whether it is through school clubs, athletics, performing arts, or responsibilities within their families such as caring for younger siblings or navigating systems for a parent whose first language is not English, students often learn skills that will be valuable for college and careers. How can we work together to find more systematic ways to support students so they can identify the ways they learn life-readiness skills both inside and outside of school?

“The key learning skills and techniques comprise a series of elements that specify how students can take greater ownership of their learning and another set of teachable skills that enable students to learn more efficiently and effectively. Success in postsecondary education and job training programs is contingent on learners being able to learn with greater independence and efficiency.”

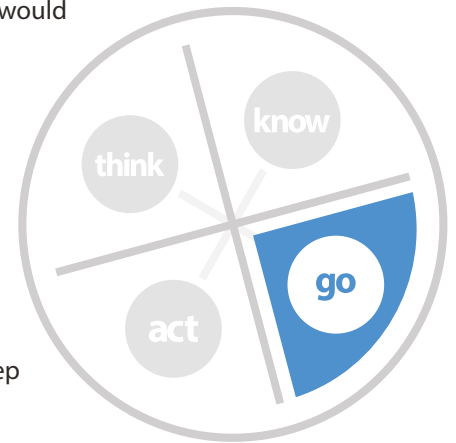
– Dr. David Conley
Getting Ready for College, Career, and the Common Core

Go

Transitions are difficult. There is complexity in understanding a new set of unspoken expectations, navigating unfamiliar systems, figuring out how to maintain a sense of self, and at the same time remaining open to learning about how others approach the world around them. Students need to be able to do all these things as they leave high school, but also as they transition from elementary to middle school, from middle to high school, from postsecondary education to careers, when starting new friendships/relationships, moving to a new town, starting a new job, etc. The questions below are based on Dr. Conley's *Key Transition Knowledge and Skills* and address many of the areas that adults continue to work on improving throughout their lives:

- *How do I set goals and decide if my next step is a good fit?*
- *How will I navigate the processes necessary to make my dreams a reality?*
- *Do I know how to finance my plans for the future?*
- *Am I developing my identity while respecting the culture and people around me?*
- *Can I advocate for myself and others in a new situation when necessary?*

Imagine how powerful it would be if students had the opportunity to develop these skills systematically from the beginning of their school experience. In what ways would it transform how students learn, and also how our culture and society approach opportunities and conflicts? By equipping students with the knowledge and skills needed to approach new environments with purpose and also with understanding and respect for others in the environment, we are doing more than simply transforming how students learn. We have the potential to influence how our culture and society approaches opportunities and conflicts as we navigate these transitions together. We also have the opportunity to teach students how to avoid costly financial and emotional mistakes that can occur when we go through transitions without fully understanding if our next step is a good fit with our overall life goals.



“They [students] need to understand more about college and career readiness than knowing they need to take courses with particular titles. They need to grasp the significance of the fact that they are about to embark on a life transition, one of the most significant and wrenching transitions they will ever face. Most students are not aware of the scope, scale, or severity of this transition.”

– Dr. David Conley

Getting Ready for College, Career, and the Common Core



Facilitating Conversations Around the Four Keys

FOR EDUCATORS

The following two protocols can be used to facilitate conversations with educators in order to better support student development of the Four Keys.



Life-Ready Students

TIMING: APPROXIMATELY 45 MIN

PURPOSE

Describe a student walking across the graduation stage who is ready to successfully transition and navigate the world beyond high school.

PROCESS

Individual Framing (7 min)

List characteristics, skills, mindsets, and behaviors of this student.



Which 1-2 of these attributes have helped you the most through transitions in your own life? Why? Think of specific examples.

Sharing of Ideas (15 min)



Round 1: Walk around the room introducing yourself to others. When the facilitator indicates, briefly pair up to share and discuss what attributes were most helpful for your own life and why you identified those particular skills.

Round 2: Walk around the room introducing yourself to others. When the facilitator indicates, briefly pair up to share and discuss the following: What is the system doing to enable students to develop these skills? What SHOULD the system be doing (that it currently isn't) to enable students to develop these skills? What about teachers, administrators, the broader school staff, and others?

Mapping to Think, Know, Act, Go (15 min)



As a group, identify which of the Four Keys each skill fits with best. Use the Four Keys worksheet and definitions to help with this process.

Whole Group Share Out (8 min)

Students need to do more than retain or apply information; they have to process and manipulate it, assemble and reassemble it, examine it, question it, look for patterns in it, organize it, and present it. They need intentional patterns of thinking to draw on as they complete work after high school.

Students need strong foundational knowledge in core academic subjects, and they also need to have an understanding of the structure of knowledge (the big ideas and how those ideas frame the study of the subject). However, it is not enough to have students learn high-quality content. They need to understand that success at learning content is a function of effort much more than aptitude.



Students need skills and techniques to take ownership and successfully manage their learning in educational and career opportunities after high school. In the absence of these critically important skills, students remain dependent learners who struggle when expected to work independently because they lack the needed set of tools.

Students preparing for a career or to further their education beyond high school must navigate numerous potential pitfalls if they wish to successfully transition. They must cope with issues ranging from correctly submitting postsecondary applications to knowing when to seek help or advocate for their best interests.



What are Educators Doing to Intentionally Incorporate the Four Keys?

TIMING: APPROXIMATELY 45 MIN

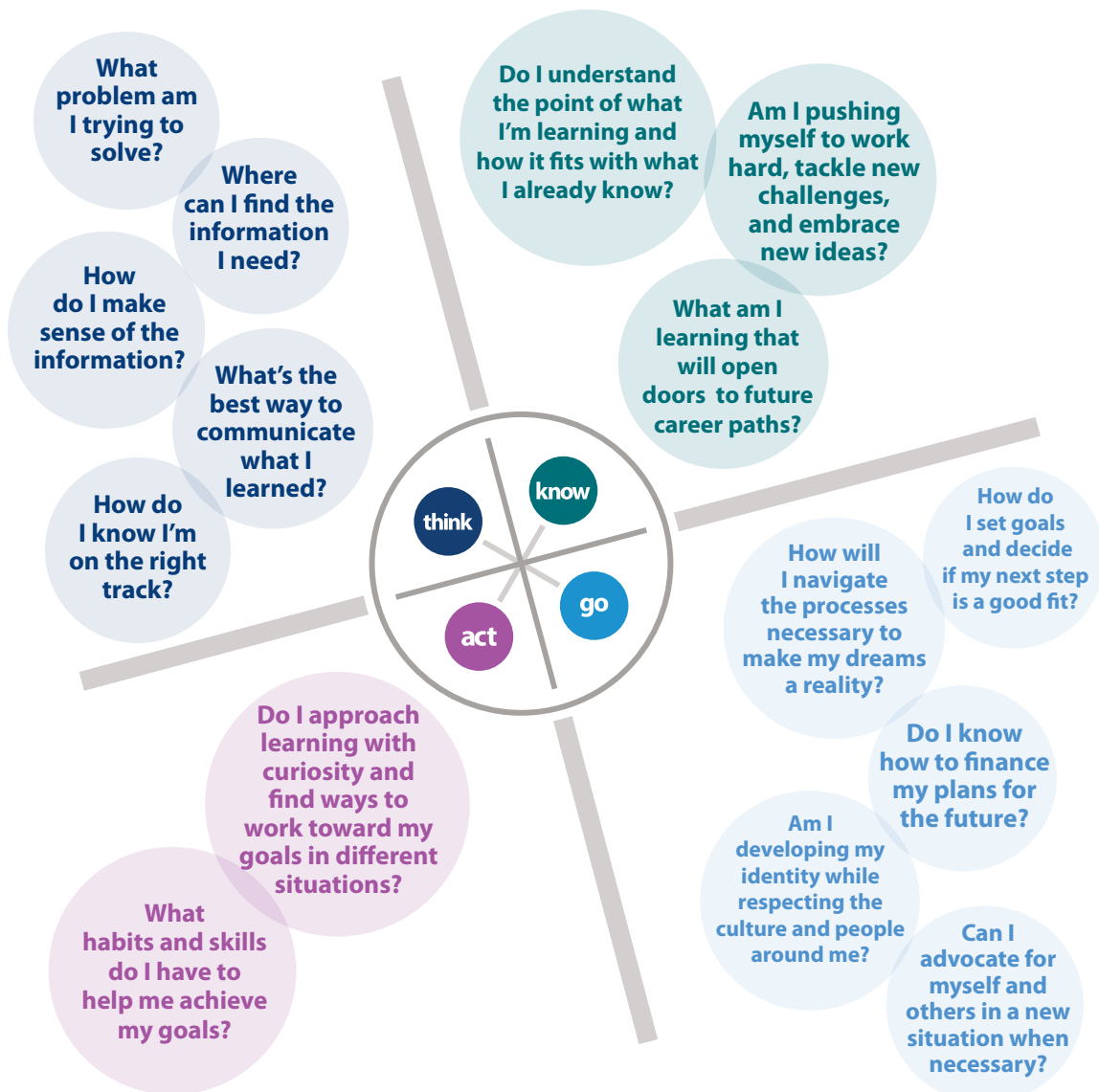
PURPOSE

Identify the educator behaviors that are taking place to encourage/enable/create specific outcomes for students to equip them with life-readiness skills in all areas of the Four Keys.

PROCESS

Individual Framing (5 min)

Think about how your time is allocated in helping students answer and understand the Four Keys.



In your role, what do you do instructionally to address each quadrant of THINK, KNOW, ACT, and GO with students or to support other educators so they can better support students in each quadrant? Think about:

Yesterday: _____

One week ago: _____

One month ago (if you can remember that far back): _____

Sharing of Ideas (15 min)



Form groups of 3 to 5 people and share with each other what you individually identified and discuss what you felt was most effective to equip students to be life ready.

Job-Alike Share (20 min)



Gather into job-alike groups and pair-share. Start by sharing what you have already been doing to support student development of the Four Keys and then begin identifying opportunities for supporting students in your future work.

Pair share 1: Find a job-alike person and share.

Pair share 2: Your pair should find another pair and share.

Pair share 3: Your quad should find another quad and share.

Whole Group Share Out (5 min)



Facilitating Conversations Around the Four Keys

FOR STUDENTS

If the Centers for Disease Control can facetiously use a hypothetical zombie apocalypse to emphasize the importance of emergency preparedness, why not use the same scenario to engage students in conversation around the skills they need for life readiness? The first protocol in this series introduces the Four Keys to students and can be used to facilitate a general conversation about all of the Keys. The subsequent protocols give students the opportunity to spend more time thinking about the specific skills and learning techniques identified in each Key (THINK, KNOW, ACT, GO).



The Four Keys to Surviving a Zombie Apocalypse

Life is full of unexpected transitions. Imagine that 80% of the world's population is dead, but some are UNDEAD...and zombies are taking over the earth. Somehow, you've managed to be one of the lucky ones, but in this new world with unknown variables, how will you navigate the daily challenges and survive?

We've all watched a movie or read a book that pushes us to imagine what the world would be like if zombies walked among us (and ate our brains). While we don't expect this hypothetical scenario to become a reality anytime soon, the imagined world of a zombie apocalypse gives us a good setting to think about new applications for the Four Keys. Even the Centers for Disease Control thinks a hypothetical zombie apocalypse is an ideal situation to consider what it means to be prepared (check out their website at www.cdc.gov/phpr/zombies.htm).

The Four Keys are intended to be a framework for lifelong learning, and part of being a lifelong learner involves navigating new and unexpected situations that challenge us to develop and grow. The following activity is intended to get you thinking creatively about each of the Four Keys and how they can apply to a novel (even if unrealistic) experience. You can use this activity for personal reflection and with a group – make it fun and don't be afraid to get creative!

INDIVIDUAL REFLECTION

Keeping this new and dangerous world in mind, think about the Four Keys and how each one can help you survive. Use the following questions as prompts if you need inspiration:



What problems will I need to solve in a world full of zombies?

Where can I find the information I will need to survive, and how will I make sense of it?



What knowledge do I have that will help me live another day (or many days)?

How will I challenge myself to tackle new and scary situations and learn new skills to help me survive?



What habits and skills will I need to master and practice?

How will I identify goals for my future and work towards them?



How will I obtain and manage the resources I will need to survive?

Can I advocate for myself and others when necessary?

GROUP REFLECTION

Discuss your thinking as a group. What thoughts or ideas were common among group members? Are there ideas that only one group member came up with? What do you think now that you have heard a variety of perspectives?



THINK Your Way Through a Zombie Apocalypse

Scenario:

Imagine the world has been overrun by zombies. You have fled your home and neighborhood to an unfamiliar suburb outside of a major U.S. city. The government and infrastructures that keep our society functioning have crumbled and the only resources you have to help you survive are your own wits, good health, a functioning vehicle, and five gallons of gas. And you want to live.



Individually, spend two minutes reflecting on your current situation, and think about the following:

- *What problems do you face?*
- *What solutions can you imagine to those problems?*



As a group, discuss the problems you identified and your potential solutions to those problems.

- *What emerged as the group's highest priorities?*
- *Do you agree on what problems are the highest priorities?*
- *What solutions did others identify that you may not have considered?*



Select one problem as a group, and brainstorm a list of possible solutions to overcome that problem. Then, try to answer the questions below as a group.

- *How will you find the information you need? Think about what information may not be available because of constraints in the zombie-filled world (i.e. do you need to send out a scout to find out where food is located?)*
- *How will you make sense of the information you have (or don't have)? Will the information you have be impacted by unexpected new information (like a zombie horde blocking the highway)?*
- *How will you record or communicate your plan? You may need to find ways to organize varying information (such as a map of locations where zombie hordes are rumored to be, or locations of blocked roads).*
- *How will you know if your solution will work? Some of your information may be outdated, causing your solution to fail. How will you adapt your solution to accommodate new information that changes the likelihood of success?*



Is there any information you are learning right now in your classes that could help you in a zombie-filled world– like calculating the speed of zombies and plotting intersecting arcs, or using map drawing skills? How can the questions above and the strategies you use to answer them be applied to what you are learning throughout the day?



KNOW You Can Solve the Apocalypse

Scenario:

You are the newly appointed interim head of the Center for Disease Control (CDC). Your predecessor was a mega-genius who single-handedly was very close to reversing the apocalypse. However, she recently lost her head and the main CDC facility was taken over by zombies.

As the new leader you need to rebuild the lab and lead a small team of the brilliant (but terrified) scientists who are still alive in order to solve the zombie apocalypse. You've lost much of the research data in the recent zombie attack, but your team has salvaged some files and you need to use your collective strengths to recreate the progress you had made before the attack.



Spend two minutes reflecting on your new role, and think about the following responsibilities you have:

- *How will you integrate the information from various sources into a framework of what you already know?*
- *What attitudes will help you and your team be successful?*



As a group, discuss your approaches to this incredibly important responsibility. The lives of every living person depend on your success.

- *How will you create a way to organize your knowledge as a team?*
- *What attitudes did you identify as important and why?*



As a leader it's critical that you develop a growth mindset along with supporting your team to do the same.

- *How will you model growth mindset behavior?*
- *How will you encourage your team to develop a growth mindset?*
- *In this high-stakes setting, how will you communicate that failing on small tasks can help lead to success on the overall goal?*
- *How will you encourage your team to challenge themselves to try new approaches?*

What Does Growth Mindset Look Like?

Students who have a growth mindset know that their behavior and the decisions they make matter.

They know that learning is not always easy, and it's the time, energy, and learning strategies devoted to understanding a subject area that can make a big difference.



ACT Like You Can Survive a Zombie Apocalypse

Scenario:

You've recently become a member of a rag-tag group of survivors of a zombie apocalypse. In a world dominated by the undead you are happy to be among the living— at least for now. Some members of your group you've known for a long time, and some are relative strangers. With so few humans left on earth, you can't afford to be picky about who is part of your group and it's a necessity that you work together effectively. Now that you aren't alone in the world, the prospect of surviving this apocalypse seems possible. For the first time in a long time, you can think beyond the chaos of the moment and look towards the future with a sense of hope.



Spend one minute reflecting on your dreams for the future.

- *What are your goals for one week from now? Two months from now? Three years from now?*



As a group, discuss the goals you share. Discuss the following topics, and identify how as a group you can work together to:

- *Set short- and long-term goals and monitor your progress towards goals.*
- *Persist in the face of setbacks, challenges, and zombies.*
- *Be aware of your strengths/weaknesses, and reflect on how they impacts your survival.*
- *Stay motivated even when things seem hopeless.*
- *Ask for help when you need it, and proactively identify when you need assistance.*



Think about your shared goals, and individually rank order the following skills in terms of how helpful they will be toward your group's survival goals. Compare and discuss your individual rankings as a group.

- *Time management*
- *Test taking*
- *Note taking*
- *Information retention/memorization*
- *Strategic reading*
- *Collaboration and group learning*
- *Technological proficiency*



GO Into the Future Like a Zombie Wants to Eat Your Brains

Scenario:

The world has changed, and despite the best efforts of scientists nobody can reverse the zombie apocalypse. It's up to you to adapt to this strange and horrifying new world and find a way to survive amongst the undead. As difficult as it may seem, you aren't completely alone and whether you know it or not there are resources you can access to increase your odds of survival.



Think about the types of issues that will make your transition challenging. Which of the categories below will be most challenging for you personally?

Contextual: You need to understand the motivation of zombies and options for the survival strategies you have chosen. This includes knowing the types of strategies available and why one might be a good match; identifying backup options if your first choice does not work out; and having a sense of the probability that you will actually survive.

Procedural: You must be able to address the "how to" of the survival process. Survival strategies are not easy, often requiring multiple steps. Navigating through the steps in a timely manner is crucial to staying.

Resources: You must be aware of the resources you need to survive, and what options are available to obtain the necessary resources.

Cultural: You need to understand the differences between the cultural norms in pre-apocalyptic and post-apocalyptic worlds. You should be ready to be more independent and self-reliant.

Personal: You should be able to advocate for yourself and others in complex environments and be prepared to pursue your interests assertively with a range of adults in positions of authority, including sheriffs, scientists, bandits, zombies, etc. You should be prepared to effectively challenge a decision that affects you negatively, like being asked to be zombie bait.



As a group, discuss the categories you each selected as most challenging. Was there a particular category that stood out as being more difficult for folks? Brainstorm how you can individually or as a group access supports in areas where the transition will be challenging. If possible, identify at least one resource that is available in your post-apocalyptic world for each area of challenge.

know

think

inflexion

decisions that drive student readiness

www.inflexion.org

Toll Free: 877.766.2279 • Main Office: 541.246.2600
360 E. 10th Avenue, Suite 300 • Eugene, OR 97401

go

act