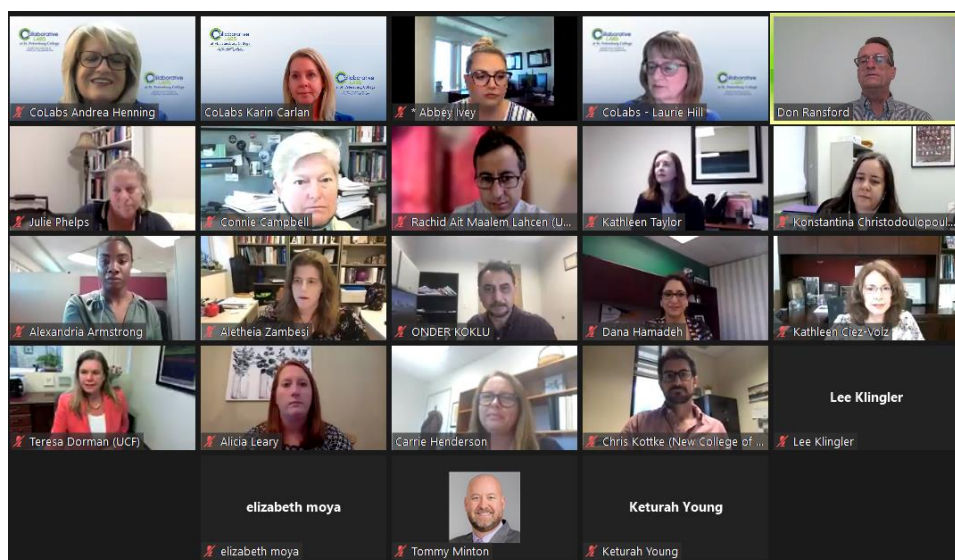
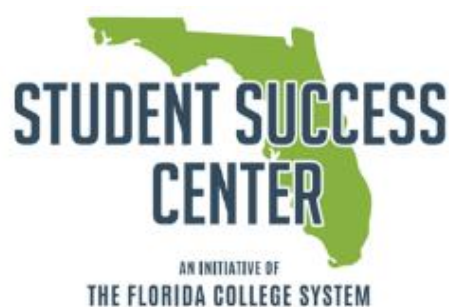


Mathematics Pathways Committee Orientation



Real-Time Record

September 23, 2021



EXPERT FACILITATORS IN
STRATEGIC COLLABORATION


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Agenda

Mathematics Pathways Committee
Orientation

AGENDA



September 23, 2021

10:00 – 10:10 a.m. Welcome and Introduction to the Work

- Florida Mathematics Re-Design Initiative
- Senate Bill 366

10:10 – 10:30 a.m. Activity with the Collaborative Labs

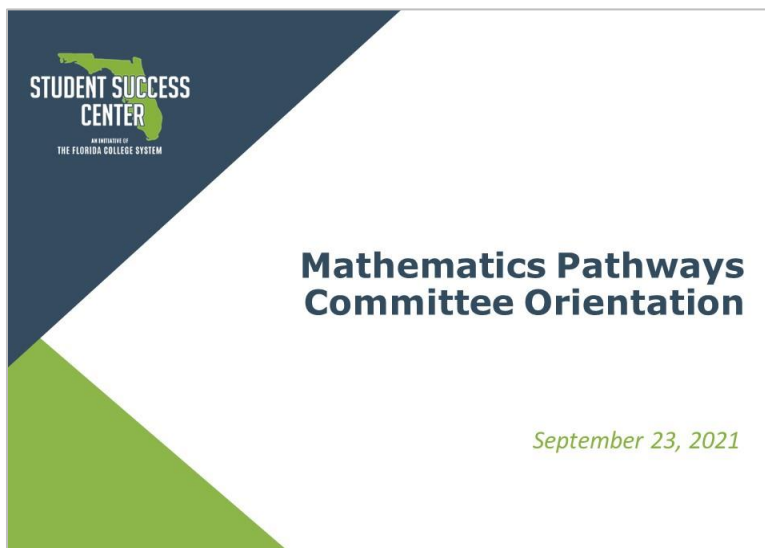
Let's leverage our Compass Points as a Math Pathways Committee: This activity uses a set of preferences which relate not to individual but group behaviors, helping us understand how preferences affect our group work:

- North: Acting
- South: Caring
- East: Speculating
- West: Paying Attention to Detail

10:30 – 11:00 a.m. Committee Overview

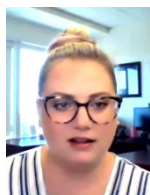
- Charge
- Structure and membership
- Roles and responsibilities
- Timeline and meeting schedule

Welcome



Agenda

- Welcome and introductions
- Introduction to the work
 - Florida Mathematics Re-Design Initiative
 - Senate Bill 366
- Activity with the Collaborative Labs
- Committee charge and process



Abbey Ivey, Director, Florida Student Success Center (FSSC): Good morning! The purpose of today's meeting is to orient the committee to the task ahead. We will get to know each other as we get into this work and talk more about the charge and process. Thank you for volunteering to serve on this committee.

We have several members of the Florida Department of Education Florida Board of Governors Office with us today who are here to serve as staff liaisons including Disraelly Cruz, Christy England, and Brittanian Gamble. Tara Goodman and Kathleen Taylor are supporting the career center side. For the Florida Colleges, we have Carrie Henderson and Katie Grissom. From the Office of Articulation, we have Elizabeth Moya and Alexander Armstrong. We have a fully staffed team to support you throughout this work.

What is the Florida Student Success Center?

- Supports Florida's 28 state colleges' efforts to develop student-centered pathways and increase student completion rates
- The 15th state to join the national Student Success Network
- Launched in 2018 in partnership with
 - Jobs For the Future
 - Helios Education Foundation
 - Florida College System Foundation



Abbey: The Student Success Center is housed within the Florida College System to support student success pathways. It is part of national network and we have been operating for three years now. Math reform is a major component.

Florida Mathematics Re-Design Initiative

- Nationally, hundreds of thousands of students **fail** higher education math courses each year, when the math courses they're placed in may not be the most appropriate for their major or career path.
- Math is the most **significant academic barrier** to postsecondary attainment.
- To ensure that all students achieve momentum to earn a college degree, we must **work together** to redesign pathways and courses, modernize content and instruction and eliminate barriers.
- To that end, Florida high school, college and university faculty collaborated on a statewide initiative to **close achievement gaps** and improve **student success in mathematics**.

Source: Dana Center Mathematics Pathways

www.flstudentsuccess.org

Abbey: Math redesign is the first major undertaking of Florida Student Success Center. Math is the most significant academic barrier to student success. This is a cross-sector collaborative effort. From that, the Florida Mathematics Re-Design Initiative was born.

Mathematics Workgroups

High School to Postsecondary Alignment

Explore how high school curriculum in mathematics aligns with postsecondary expectations

- Clarify college entrance-requirements alignment with high school assessments and courses
- Examine longitudinal student data on mathematics sequencing and student success rates
- Engage high school and college mathematics faculty in dialogue about postsecondary expectations
- Identify strategies that promote greater alignment

FCS Mathematics Sequences

Examine multiple pathways for students to enter based on programs of study as well as the re-design of course structures to maximize support for students

- Identify course and institutional structures that promote and deter success
- Encourage the modernization of mathematics content
- Review data on student success across algebra and non-algebra pathways
- Identify a sequence of courses in the context of a student's intended transfer major/meta-major

FCS to University Alignment

Examine how FCS curriculum in mathematics aligns with university expectations, particularly for students in transfer programs

- Clarify university mathematics requirements
- Examine the longitudinal student data on mathematics sequencing and student success rates
- Engage FCS and SUS mathematics faculty in dialogue about postsecondary expectations
- Identify strategies that promote greater alignment

Abbey: The center established three interconnected workgroups including over 90 faculty and staff from the Florida college system, the state university system, and the K-12 sector. The workgroups focused on three areas. The charge was to identify the challenges and work towards recommending solutions.

Florida Mathematics Re-Design Recommendations

- Culmination of the year-long Florida Mathematics Re-Design Initiative
- Includes 11 recommendations for state policy, institutional policy and evidence-based practices designed for scale
- One of the recommendations was to "create common mathematics pathways by aligning mathematics courses to programs, meta-majors and careers in Florida"



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Abbey: The year-long effort culminated in eleven policy and practice recommendations. One of the most powerful recommendations was to create common math pathways by aligning courses to programs, majors, and careers.

Why Math Pathways?

Research shows:

- Students need different mathematics skills depending on their programs of study.
- Many institutions still use the college algebra pathway as the primary pathway for their students, even if the liberal arts mathematics/statistics pathway may be more appropriate for their degrees.
- Not all students are well served by traditional algebra-based calculus sequences; in fact, research shows that courses that are meaningful to students increase their engagement, which, in turn, increases their success.

The ultimate goal of the recommendation is to increase graduation and success rates and to make sure students graduate without excess credit hours.

Abbey: Research shows that students need different math skills based on their program of study. The default was to put students in college Algebra regardless of their path, but not all students are well served by that sequence. The goal is to create three common math pathways to increase student success. That is the charge of this committee.

Mathematics Pathways Legislation

- The pathways recommendation is reflected in SB 366 from the 2021 legislative session
- The bill states:
To facilitate seamless transfer of credits, reduce excess credit hours, and ensure students take the courses needed for their future career, the articulation agreement must establish three mathematics pathways for students by aligning mathematics courses to programs, meta-majors, and careers. A representative committee consisting of State University System faculty, faculty of career centers established under s. 1001.44, and Florida College System institution faculty shall collaborate to identify the three mathematics pathways and the mathematics course sequence within each pathway which align to the mathematics skills needed for success in the corresponding academic programs and careers.

Abbey: The work that came out of the initiative is reflected in the 2021 legislative session. Summarized, it says the articulation agreement must include three pathways that align to

programs, meta-majors, and careers. This representative committee will collaborate to determine what the pathways should be. Thank you for being willing to serve on this committee; it has been several years in the making.

Compass Activity



Andrea: Thank you, Abbey, for your continued support. I would like to introduce two of my Collaborative Labs colleagues, Karin, who is taking meeting notes, and Laurie, our business development guru.



Andrea: The compass activity helps us get to know each other and leverage our strengths in this committee. It is an overview of the strengths in our group. There are four compass points. Think about and share which two are your top compass points and the strengths in each area that are important to committee work. You can also share how you have leveraged your strengths in an impactful way.

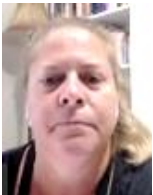
Compass Strengths

1. What are your Top 2 Compass Directions of choice? (Multiple Choice) *

- | | |
|---|-----|
| 1. North: ACTING: Let's Do it! Likes to act, try things, plunge in! | 46% |
| 2. South: CARING: Likes to know everyone's feelings and voic... | 31% |
| 3. West: PAYING ATTENTION TO DETAILS: Likes to know the W... | 65% |
| 4. East: SPECULATING: Likes to look at the big picture and po... | 54% |



Marc Campbell, Daytona State College: North is my top direction. I have been in education for 27 years, and I have found that education is the area that seems to react the slowest. When I like something, I move on it. As we move forward, we can adjust as necessary. We can spend too much time planning; by the time we implement it, the situation is different.



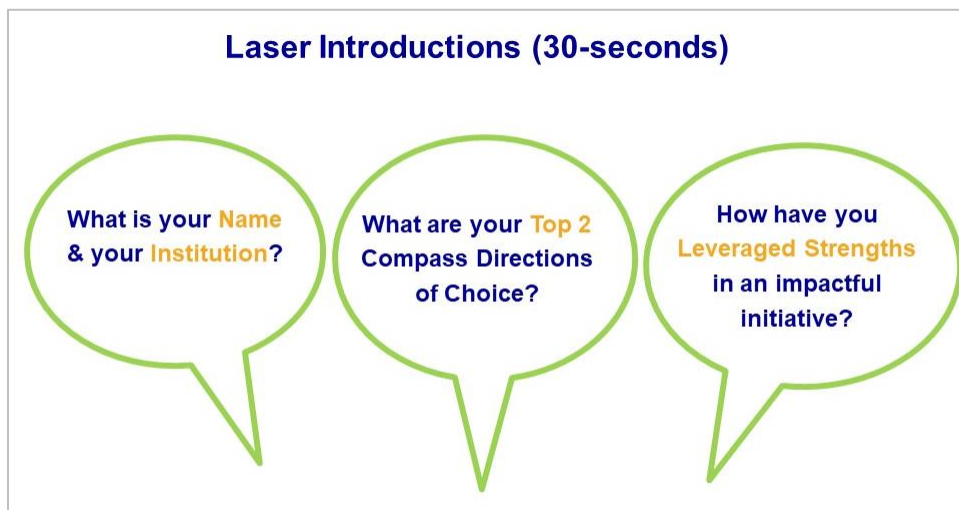
Julie Phelps, Valencia College: South is my first direction. I help people find their passion and get them to engage.



Alicia Leary, Fred K. Marchman Technical College: I am West. Taking time to look at details is very important. You can spend too much time though.



Teresa Dorman, University of Central Florida: I am East. I look at how the dominos may fall...what are the implications are, the big picture.



Andrea: We will do short 30-second per person introductions; please share your name, institution, your top two directions, and how you leverage your strengths.

Alicia Leary: West and North. Building new programs, especially acquisitions, is where I apply my strengths.



Kathleen Ciez-Volz, Florida State College at Jacksonville: South and East. These have been strengths in an initiative to develop international education in our college.



Donna Soncrant, First Coast Technology College: North and East. I transitioned from a K-12 curriculum director in math, to college. It is a big change and very exciting.

Abbey: East and West. I like to look at the big picture but am detail oriented. This can be applied to what we do at the FSSC.



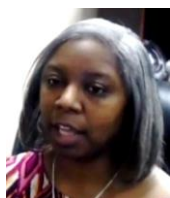
Aletheia Zambesi, University of West Florida: West and South. The two work well together; get buy in and move people forward. It is useful in working with faculty.

Teresa Dorman: West and East. Collaborative discussions and decision making are my strengths. I am involved with the curriculum alignment program and student advising initiatives and working with individual departments to develop new programs.



Jimmy Chang, St. Petersburg College: South and West. I leverage these strengths when collaborating with faculty and others and I cover all the details before acting.

Julie Phelps: North and South. I get it done and ask for forgiveness with how fast I move. I want to do work for students that need it the most.



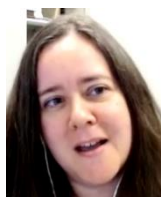
Kalynda Holton, Tallahassee Community College: North and West. These strengths help in pathways work and creating courses.



Allison Crume, University of South Florida: North and South. My strengths helped in building relationships.



Chris Kottke, New College of Florida: East and West. They cancel out, but this is four-dimensional. I have been involved with redesigning math the pathways to make it more inclusive and flexible.



Konstantina Christodouloupoulou, University of Florida: West and South. They help me as undergraduate coordinator, in problem solving with students and caring about their future.



Tommy Minton, Seminole State College of Florida: West and East. In my role as dean, everything is in the details. Being involved with the math pathways initiative, it is all about the big picture and moving forward.



Rachid Ait Maalem Lahcen, University of Central Florida: North and South. When it comes to collaboration, I am these two directions. I listen to what everyone is saying and focus on the common goal.



Onder Koklu, Florida Gulf Coast University: West and North. Act more and talk less. Answer the who, what, where questions and look at details.



Connie Campbell, Gulf Coast State College: North and East. I really get a charge out of speculating what needs to be done and doing it.



Dana Hamadeh, Palm Beach State College: North and West. I like to know what resources we have and why we are doing something.

Marc Campbell: North and West. I've learned that sometimes to make things happen, you have to act first and ask for forgiveness later.



Tara Goodman, Division of Career and Adult Education: East and West. I have interest in jobs and looking at the big picture concerning pathways.



Don Ransford, Florida Southwestern State College: South and East. I have taken a lot of leadership roles in committees and initiatives. I set good goals for organizations and make sure everyone feels a part of meeting those goals.



Lee Klingler, Florida Atlantic University: East and West. As department chair, I make sure details are there and fit in the big picture.

	North Acting	South Caring	East Speculating	West Attention to Detail
Committee Member	Compass Direction			
Abbey Ivey			X	X
Aletheia Zambesi		X		X
Alicia Leary	X			X
Allison Crume	X	X		
Chris Kottke			X	X
Connie Campbell	X		X	
Dana Hamadeh	X			X
Don Ransford		X	X	
Donna Soncrant	X		X	
Jimmy Chang		X		X
Julie Phelps	X	X		
Kalynda Holton	X			X
Kathleen Ciez-Volz		X	X	
Konstantina Christodouloupoulou		X		X
Lee Klingler			X	X
Marc Campbell	X			X
Onder Koklu	X			X
Rachid Ait Maalem Lahcen	X	X		
Tara Goodman			X	X
Teresa Dorman			X	X
Tommy Minton			X	X

Committee Overview

Committee Charge

- Collaborate to identify:
 - The three mathematics pathways
 - The mathematics course sequence within each pathway which align to the mathematics skills needed for success in the corresponding academic programs and careers

Abbey: The charge of the committee is to collaborate what the three math pathways will be and the course sequence.

Committee Details

- The committee is composed of:
 - 8 members representing the State University System (SUS)
 - 8 members representing the Florida College System (FCS)
 - 2 members representing the school district career centers
 - 1 non-voting member who serves on the Articulation Coordinating Committee (ACC)
- Note that faculty from other disciplines will be engaged in the process, and we will provide updates to institutions as the work progresses.

Abbey: Here is who is on the committee. We will engage other faculty throughout the process. We are mostly from the math field, but we will engage those from top transfer majors.

Name	Title	Institution
Aletheia Zambesi	Assistant Chair, Lecturer, Mathematics & Statistics	University of West Florida
Alicia Leary	Assistant Director	Fred K. Marchman Technical College
Allison Crume	Associate Vice President & Dean of Undergraduate Studies	University of South Florida
Christopher Kottke	Associate Professor, Mathematics	New College of Florida
Connie Campbell	Associate Professor, Mathematics	Gulf Coast State College
Dana Hamadeh	Associate Dean, STEM & Health Science	Palm Beach State College
Donald Ransford	Professor, Mathematics	Florida SouthWestern State College
Donna Soncrant	Career Specialist	First Coast Technical College
Jimmy Chang	Dean, Mathematics	St. Petersburg College
Julie Phelps	Professor, Mathematics	Valencia College
Kalynda Holton	Dean, Science and Mathematics	Tallahassee Community College
Kathleen Ciez-Volz	Associate Provost, Curriculum and Instruction	Florida State College at Jacksonville
Konstantina Christodouloupoulo	Undergraduate Coordinator, Mathematics Department	University of Florida
Lee Klinger	Professor, Department of Mathematical Sciences	Florida Atlantic University
Marc Campbell	Chair, School of Mathematics	Daytona State College
Onder Koklu	Assistant Professor, Department of Teacher Preparation	Florida Gulf Coast University
Rachid Ait Maalem Lahcen	Associate Lecturer, Mathematics	University of Central Florida
Teresa Dorman	Associate Dean, College of Sciences	University of Central Florida
Tommy Minton	Dean, Mathematics	Seminole State College of Florida

Abbey: We will post the committee members for your use.

Roles and Responsibilities

- Committee members will be expected to attend all committee convenings and actively participate in identifying the mathematics pathways.
- The majority of the work of the committee will occur during the fall 2021 term via virtual convenings.
- Additional work between convenings, while likely minimal, may also be required.
- The center will provide a \$500 stipend for service on the committee.

Abbey: We know that situations arise, but this work is accelerated over a three-month timeframe and your participation is important. The meetings are already established; everything

will be virtual. Please email your W-9 form to me for processing your stipend (Abbey.Ivey@fldoe.org).

Timeline

Activity	Expected Timeline
Committee finalizes mathematics pathways and course sequences	December 2021
ACC considers proposed mathematics pathways and course sequences	February 2022
Florida Department of Education (FDOE) initiates rule development process/Office of the Board of Governors (BOG) initiates regulation development process to incorporate math pathways	March-July 2022
State Board of Education/Florida Board of Governors considers mathematics pathways rule/regulation revisions	August 2022
FDOE/BOG notify institutions and provide technical assistance	August 2022
Mathematics pathways effective for entering students in associate and baccalaureate degree programs	2023-24 academic year

Abbey: Meetings are scheduled to have pathways and course sequences by December. The Articulation Coordinating Committee will consider this work in February. Rule and regulation development will commence from there. The process takes time, so we account for that. In the summer of 2022, we will notify institutions and the pathways will be active for the 2023-24 school year.

Upcoming Meetings Schedule

Meeting	Date	Goals
Kick-off	October 11 10 a.m. – 12 p.m.	<ul style="list-style-type: none"> Understand national context Confirm plan to identify the pathways and courses
Full day meeting	November 18 9 a.m. – 4 p.m.	<ul style="list-style-type: none"> Identify essential learning outcomes Solidify the three pathways Begin aligning courses to the pathways
Closing	December 8 10 a.m. – 12 p.m.	<ul style="list-style-type: none"> Finalize pathways and course sequence recommendations

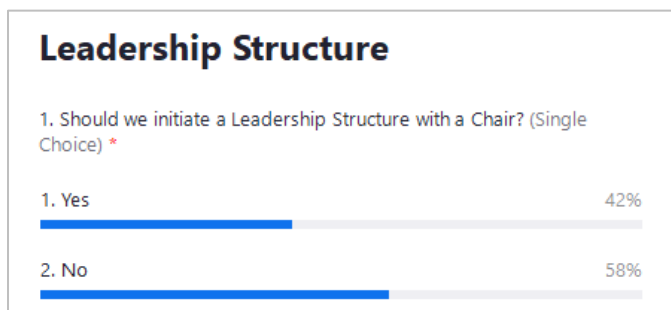
Abbey: In October, we will have a guest speaker to discuss how other states have tackled the work and implemented math pathways. The November meeting will be a full day where we will

tackle essential learning outcomes, solidify the three pathways, and begin aligning those courses. In December, we will wrap up and finalize the recommendations.

Abbey: I want to pose a question to the group about leadership structure. Would you like to elect a chair or keep it flat within the committee? Staff will be facilitating, and you will be supported. We want to get your feedback because it will be led by you.

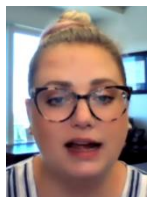
Teresa: What would the responsibilities be?

Abbey: We could discuss them as a committee. Basically, be the point of contact for the committee, help facilitate meetings, and set the agenda.



Abbey: The majority said "No," so we will not select a chair. Thank you for your input.

Wrap-Up and Next Steps



Abbey: We have a website for this committee:
<https://www.floridacollegesystemfoundation.org/fsscmathpathways>.

We also have a handbook for the committee. You will see meeting notes and recordings posted on the website. I will follow up with an email.

Please reach out to any of the names on the list if you need any help or support.

Support

Name	Title	Email
Disraelly Cruz	Director, Planning and Policy, BOG	Disraelly.Cruz@flbog.edu
Christy England	Vice Chancellor, Academic and Student Affairs, BOG	Christy.England@flbog.edu
Brittanian Gamble	Assistant Director, Academic Affairs, BOG	Brittanian.Gamble@flbog.edu
Tara Goodman	Vice Chancellor, DCAE	Tara.Goodman@fldoe.org
Katie Grissom	Deputy Director, Academic Affairs, DFC	Katie.Grissom@fldoe.org
Carrie Henderson	Executive Vice Chancellor, FCS	Carrie.Henderson@fldoe.org
Abbey Ivey	Director, Florida Student Success Center, DFC	Abbey.Ivey@fldoe.org
Elizabeth Moya	Assistant Vice Chancellor, Articulation & Career Education Policy, DCAE	Elizabeth.Moya@fldoe.org
Mike Sfiropoulos	Director, Academic Affairs, DFC	Mike.Sfiropoulos@fldoe.org
Kathleen Taylor	Bureau Chief, DCAE	Kathleen.Taylor@fldoe.org
Keturah Young	Program Coordinator, Florida Student Success Center, DFC	Keturah.Young@fldoe.org

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Abbey asked the committee for any outstanding questions, and there were none.

Abbey: Thank you all! It was a pleasure seeing you again and meeting some of you virtually. Look for an email with a link to our website.