ORIGINAL PAPER

Assembling Curriculum: A Framework

Author: Hilary R. Tanck¹

Abstract: Middle school teachers today have access to an overwhelming array of curriculum resources, from traditional textbooks to digital tools. Teachers must navigate this inundation to select, adapt, and enhance curriculum materials to meet the unique needs of their middle school students. Through my work with four middle school teachers, I developed the Curriculum Assemblage Framework—a practical tool helping teachers thoughtfully select and combine resources to meet their students' needs. By sharing these teachers' experiences and the framework, the article aims to help teachers reflect on their current approaches to curriculum planning and to continue building their curriculum repertoire.

Keywords: middle grades, curriculum assembly, student engagement

Introduction

Middle school teachers face a daily challenge—selecting and adapting curriculum materials from an everexpanding collection of resources. Gone are the days when teachers relied solely on textbooks and worksheets. Today's educators must embrace curriculum as a dynamic, adaptable process rather than a fixed structure (Fleener, 2002) as they navigate through digital platforms, social media resources, and online learning tools while staying focused on what matters most supporting young adolescents' development and learning. Curriculum materials influence teacher practices (Moore et al., 2023) and have necessitated changes in how educators engage with the curriculum (Pepin et al., 2017).

The key challenge lies in thoughtfully evaluating and selecting materials (Webel et al., 2015) while keeping young adolescents' developmental needs at the forefront. The best middle school

curriculum strikes a balance of challenging and engaging students while creating space for exploration, diverse perspectives, and democratic learning (Bishop & Harrison, 2021). Furthermore, Brown and Knowles (2014) highlight how a balanced curriculum design creates equitable opportunities for all students to connect with content in meaningful ways.

A balanced approach incorporates interactive elements that support differentiated learning, enabling students to engage with content through multiple pathways and share their understanding in various ways (Brown & Knowles, 2014). Teachers support diverse learners by providing varied opportunities for interacting with content (e.g., reading, multimedia, hands-on exploration), practice (e.g., independent work, group projects, discussions), and assessment (e.g., written, oral, creative projects). Additionally, differentiated pacing and complexity levels ensure all students can access the content while being appropriately challenged in their

NORTH CAROLINA ASSOCIATION FOR MIDDLE LEVEL EDUCATION

TO STATE OF THE PROPERTY OF THE PROPERT

¹ Stout School of Education, High Point University, High Point, NC, USA

learning journey. This balanced approach allows all students to connect with content meaningfully while developing new skills and strategies. Teachers shape their curriculum by reorganizing lessons, creating space for student thinking, and building authentic connections addressing student needs (Drake et al., 2015).

This article presents a reflective framework developed through studying four middle school teachers' curriculum work. The Curriculum Assemblage Framework (CAF) offers a structured approach to help teachers thoughtfully select and combine resources while maintaining focus on student engagement and democratic learning. Through real examples from these teachers' classrooms, we'll explore how educators can effectively leverage modern curriculum resources while staying true to essential middle-level education principles.

Background of the Study

Middle school represents a transitional period as students move from childhood toward adolescence, requiring a unique approach to teaching. This study was specifically designed to capture curriculum work at the middle school level. One participant described middle school students as a fun group to work with, noting their growing awareness while acknowledging their still-developing maturity. Furthermore, middle school students need opportunities to practice decision-making skills and take ownership of their learning (Bishop & Harrison, 2021).

To understand teaching during this distinct phase, the study followed four teachers, Abby, Andera, Cathy, and Savannah (pseudonyms), across grades 6-8, examining how they crafted and modified curriculum using digital tools and online resources. The research captured their work

through lesson plan walkthroughs (participants explained their process as they planned lessons), schematic drawings (participants created diagrams of their curriculum work), and curriculum resources (e.g., teacher-created worksheets and guided notes, quizzes, district pacing guides). Teachers who demonstrated the use of different curriculum materials were selected to ensure that each grade level 6-8 was represented.

The Curriculum Assemblage Framework

Based on the findings from the study, I developed the Curriculum Assemblage Framework (CAF) to capture the curricular work of Abby, Andera, Cathy, and Savannah (see Figure 1). The CAF centered on four interconnected quadrants: Curriculum Materials, Organization Method, Student Engagement, and Future Ideas. The Curriculum Materials Quadrant encompassed both digital tools and traditional print materials teachers drew upon daily. The Organization Method Quadrant focused on systematic approaches to file structure, cloud storage, and planning systems that made resources readily accessible. The Student Engagement Quadrant emphasized interactive elements, varied assessment methods, and opportunities for student choice. Finally, the Future Ideas Ouadrant looked toward future growth through new tools, areas for improvement, and specific goals for curriculum development. These quadrants worked together as a cohesive system, as teachers thoughtfully assembled and adapted their curriculum to meet student needs. As components shifted in one quadrant, it often forced changes in another, creating an iterative process of implementation, reflection, and adjustment.



Figure 1 Depiction of Andrea's curriculum work using CAF

Andrea's Curriculum Assemblage Framework

Curriculum Materials	Organization Method	
• Interactive Notebook (INB)	Curriculum Matrix	
Google Slides Templates	Google Drive Structure	
District Pacing Guide	Weekly Calendar System	
PearDeck Activities	Chrome Bookmarks	
Edpuzzle Videos	Template System	
• IXL Activities		
Student Engagement	Future Ideas	\Diamond
• Interactive Foldables	Digital Math Manipulatives	
Real-time Feedback	Enhanced Student Collaboration	
Monday Drills	Expanded Digital Resources	
Friday Reviews	New Assessment Methods	
Hands-on Activities		

The four teachers in the study exhibited work in each of the four quadrants. Their ability to integrate these elements of curriculum planning provided opportunities for them to organize materials, enhance student engagement, and implement new curriculum materials. Each teacher in the study noted the importance of maintaining eye contact with the standards as they planned and innovated. Furthermore, they described how incorporating new curriculum materials and digital platforms instigated professional growth. The following section describes each quadrant and provides ideas for teachers to consider as they work in the designated quadrant.

Curriculum Materials

The teachers in the study demonstrated thoughtful approaches to selecting and adapting curriculum materials to create balanced learning experiences that challenge and engage their students. While drawing from diverse sources, including district resources, Teachers Pay Teachers,

educational organization websites, social media, and grade-level colleagues, they carefully evaluated materials to ensure they created space for exploration, diverse perspectives, and democratic learning. Savannah, for example, exemplified this balanced approach through her responsive curriculum adaptations. She consistently modified content to match varying student mastery levels while providing multiple pathways for learning through both digital and physical modalities. This flexibility ensured students were appropriately challenged while having opportunities to explore content in ways best suited to their individual learning needs. Her varied assessment strategies gave students a voice in demonstrating their understanding, shifting away from a one-size-fits-all approach to student evaluation.

Andrea intentionally structured her curriculum to create multiple entry points for engagement and exploration. She explained that students learn in diverse ways, so she strives to provide multiple learning opportunities using a variety of



formats, including digital, paper-based, and hands-on materials. This approach honored diverse perspectives and learning preferences while positioning students as active decision-makers in their learning process.

Cathy's work showed how curriculum choices can make room for student voice and real connections. Instead of just using textbooks, she made stuff that fit her students' lives. She explained that it's hard to find resources that are a perfect match, so she pulls bits and pieces from different places and changes things up, adding her own problems and local stuff. She's found that when she brings things closer to home, like using examples from their school or teachers, the students get way more into it. By using local examples and student experiences, Cathy helped all her students really get into the material and showed them that their ideas matter.

Together, these teachers demonstrated how thoughtful curriculum selection and adaptation can create learning environments balancing challenge with engagement while making space for exploration and diverse perspectives. Their approaches ensured materials met not only academic standards but also validated different ways of learning, provided multiple pathways for engagement, and supported democratic learning through student choice and voice.

Organization Method

Cloud platforms like Google Drive were instrumental in the teachers' assemblage of curriculum, enabling them to quickly adapt materials to support student needs and collaborate with colleagues. They used cloud platforms not just as a storage space but also as a dynamic platform for curriculum assembly and organization. For example, Andrea described using Google Drive for its functionality to create links, use templates, and copy and paste components from one place to the next efficiently (see Figure 2). She organized her drive by topic and unit, with each component linked back to her curriculum matrix. Moreover, she used templates to create new materials more efficiently. This organization allowed her to locate and modify materials to provide appropriate challenges while maintaining multiple entry points for student engagement with ease. Her template system enabled the rapid creation of differentiated materials that supported various learning preferences and exploration styles. Abby transitioned from static PDFs to Google Spreadsheets because it allowed her to "organize curriculum by units and topics, add links, rearrange lessons, and change the time frame for topics." Instead of using matrixes, Savannah leveraged Google Drive to organize her units and lessons in distinct folders.



Week IXL.com Week NOTES/Textbook lesson Number Skills Sheet Number Activity (click on link to be Multi Step Equations with Variable on both sides Multi-Step Linear Equations Day 1 3.1 Multi Step Math Maze Multi-Step Linear Equations Day 2 3.1 Examine Special Cases 3.2 Special Cases IXL.com DA 8 Solving Equations Review Solving Equations TEST Review 9 Solving Equations TEST 4 Functions 12 Review Graphing and Voc Understand and Graph Functions Day 1 6.1 Dixo 4 Functions 0 1 Understand and Graph Functions Day 2 6.1 on vs Not a Function MATH WORKSHOP Understand and Graph Functions Day 3 6.1 INB Quiz Compare Functions Day 1 6.5 Compare Functions Day 2 6.5 Compare Functions Day 3 6.5 eview MATH WORKSHOP Function Analysis Review What is a function TEST Slope - Proportional Relationships Module 5

Figure 2 Glimpse of Andrea's curriculum matrix

These cloud-based systems also fostered collaborative approaches to balanced curriculum design. For example, Cathy and her 6th-grade colleague used a shared matrix to develop weekly plans, dividing tasks between themselves to create diverse learning experiences. This collaboration enhanced their ability to create engaging materials that incorporated multiple perspectives and approaches to learning. By establishing these structured yet flexible systems on cloud platforms, teachers could quickly retrieve, adapt, and share curriculum materials supporting both academic challenges and student engagement.

Student Engagement

At the heart of the participants' work was student engagement. Each teacher in the study carefully crafted opportunities encouraging active participation while respecting different approaches to learning and expression. Andrea's implementation of Interactive Notebooks exemplified this balanced approach. By blending traditional paper-pencil materials with digital videos and hands-on activities, she created multiple pathways for engagement honoring different learning preferences (e.g., visual, tactile, auditory). These notebooks challenged students through rigorous content while supporting exploration through varied

representations and activities. Additionally, Andrea transformed vocabulary instruction into a collaborative learning space using Padlet, where students could engage with content in ways that felt authentic to them. Students built knowledge together, whether linking web resources, crafting personal explanations, or building upon peers' ideas. This approach positioned students as active co-creators of class knowledge, encouraging them to both challenge themselves and contribute their unique perspectives to the collective learning experience.

Cathy demonstrated how thoughtful structuring of classroom discourse could create space for diverse voices while maintaining academic rigor. She strategically balanced small group discussions, simultaneous response software, and whole group conversations to ensure all students had meaningful opportunities to engage with challenging content and share their thinking. This layered approach to discussion created multiple entry points for participation while encouraging students to explore and build upon each other's ideas.

Savannah leveraged Google Slides to create digital collaborative opportunities that balanced individual accountability with group exploration. Her approach exemplified how technology can be used to create spaces where students engage deeply



with content while contributing their unique perspectives to class discussions. These digital platforms created opportunities for students to challenge themselves and their peers while maintaining a supportive environment for exploration and growth. The teachers' approaches aligned with Bishop & Harrison's (2021) vision for middle-grade classrooms that support active and democratic learning while maintaining appropriate academic challenges. Their careful attention to balancing engagement with rigor and individual expression with collaborative learning created opportunities where all early adolescent learners could meaningfully participate in and contribute to the learning process.

Future Ideas

These four middle school teachers continuously integrated new ideas and curriculum materials. This adoption of curriculum materials pushed the boundaries of their current practices and often encouraged professional growth. Their openness to new curriculum materials and teaching methods expanded possibilities for student exploration while deepening their own professional practice. For example, Abby adopted a self-paced software students used on the occasional remote school days. Through this adoption, she was able to see the wide range of skill levels her students demonstrated. This encounter with a new curriculum material instigated a shift in her lesson plan designs. She began implementing more opportunities for students to work at their own pace and level. The introduction of student-created concept maps transformed traditional unit planning into a democratic learning experience students actively tracked their progress and

shaped their learning journey as a class. This shift created space for diverse learning paths while ensuring all students moved toward mastery of core concepts.

These four educators developed responsive feedback loops—an iterative process where teachers try something new, see how students respond, and then adjust their teaching based on what they learned from their students. They would implement new curriculum material, a digital platform or tool, or district resources to obtain and adjust student feedback. When teachers implemented new tools or approaches, student responses provided valuable data informing future instructional decisions. This cyclical process of implementation, observation, and adaptation allowed teachers to refine their practice while remaining responsive to student needs. Such feedback loops demonstrated key dynamics in educational change, where each action influences future conditions and decisions (Howard & Thompson, 2016). Innovation is important not only to expand the curriculum toolbox but also to encourage professional growth (Moore et al., 2023). Furthermore, this feedback allowed the participants to identify gaps in their curriculum work and find alternative methods for ensuring all students were supported and had a voice.

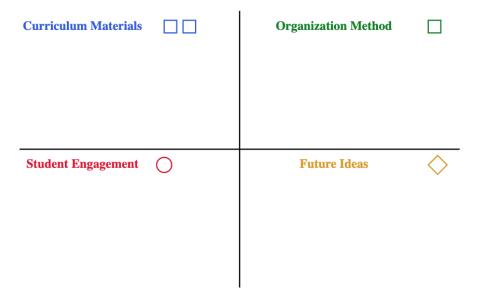
Try It Out

Ready to reflect on your curriculum practices? Let's use the Curriculum Assemblage Framework (CAF) to examine your current approach and plan for growth (see Figure 3). This can be used as an individual exercise, or if you plan with a team, consider collaborating to complete the CAF. Here's how to get started:



Figure 3 *CAF to guide your work*

Curriculum Assemblage Framework



Step 1: Initial Reflection

Begin by examining your current practices in each quadrant of the framework. Jot down a quick bulleted list in each quadrant.

Curriculum Materials

Thoughtful resource selection creates opportunities for all students to see themselves in the curriculum and actively shape their learning experiences.

- What are your go-to resources?
- What gaps do you notice in representation within your current resources?
- In what ways do students have agency in choosing how to demonstrate their understanding?
- What opportunities do students have to take ownership of their own learning?

Organization Method

The strategic organization of curriculum materials not only saves time but also allows

for quick adaptation to meet diverse student needs. Consider how your current system supports or hinders responsive teaching.

- How do you currently store your materials?
- How do you share materials and/or collaborate?
- What works well? What feels chaotic?

Student Engagement

Effective student engagement strategies must intentionally create space for all voices. Consider which student voices can be heard in your current classroom.

- How do you keep students actively involved?
- What structures support students who are traditionally less likely to volunteer?
- How do you incorporate student feedback about learning preferences and needs?



Future Ideas

Innovation in curriculum design opens new possibilities for student voice and democratic learning while spurring professional growth. Reflect on opportunities to expand your practice in ways that center student agency.

- What new approaches interest you?
- Which areas need improvement?
- How might you increase opportunities for student choice and voice?

Step 2: Implementation Plan

After your initial reflection, select one specific area for improvement. For your selected area, follow these steps:

- 1. Set a clear, measurable goal for the next month. Start small implement your change in one unit or lesson first.
- 2. Schedule a weekly time to review and adjust your progress, documenting what works and what needs modification.
- 3. Get feedback from students and colleagues.

Remember: Change is most effective when it's manageable and purposeful. Focus on one area at a time and give yourself permission to experiment and adjust as needed.

Step 3: Track Your Journey

Use the CAF template regularly (monthly is a great place to start). Continuous reflection not only supports coherent curriculum design but also spurs professional growth. Set a goal with specific dates to return to the CAF template.

Conclusion

Effective curriculum assembly in middle school requires intentional organization, strategic resource integration, and consistent focus on student engagement. Through intentional implementation of the CAF, educators can create more equitable and democratic learning environments where all students feel valued and empowered. The framework's emphasis on continuous reflection and adaptation helps teachers identify and address barriers to participation, ensure diverse representation in curriculum materials, and create multiple pathways for student success. Additionally, professional growth occurs through innovation. By implementing the framework and strategies outlined in this article, educators can create more efficient and effective learning experiences for their students while maintaining their own professional organization and growth.

References

- Bishop, P. A., & Harrison, L. M. (2021). *The* successful middle school: This we believe. Association for Middle Level Education.
- Brown, D. F., & Knowles, T. (2014). What every middle school teacher should know (3rd ed.). Heinemann.
- Drake, C., Land, T. J., Bartell, T. G.,
 Aguirre, J. M., Foote, M. Q.,
 McDuffie, A. R., & Turner, E. E.
 (2015). Three strategies for opening
 curriculum spaces.

 Teaching Children Mathematics,
 21(6), 346–353.
 https://doi.org/10.5951/teacchilmath.
 21.6.0346
- Fleener, M. J. (2002). *Curriculum dynamics: Recreating heart*. Peter Lang.



- Howard, S. K., & Thompson, K. (2016).

 Seeing the system: Dynamics and complexity of technology integration in secondary schools. *Education and Information Technologies*, 21(6), 1877–1894.

 https://doi.org/10.1007/s10639-015-9424-2
- Moore, N., Coldwell, M., & Perry, E. (2023). Exploring the role of curriculum materials in teacher professional development. In *Nonlinear perspectives on teacher development* (pp. 135–151). Routledge.
- Pepin, B., Choppin, J., Ruthven, K., & Sinclair, N. (2017). Digital curriculum resources in mathematics education: Foundations for change. *ZDM Mathematics Education*, 49, 645–661. https://doi.org/10.1007/s11858-017-0879-z
- Webel, C., Krupa, E. E., & McManus, J. (2015). Teachers' evaluations and use of web-based curriculum resources to support their teaching of the Common Core State Standards for mathematics. *Middle Grades Research Journal*, 10(2), 49–64. https://eric.ed.gov/?id=EJ1144331

Hilary R. Tanck is an Assistant Professor at High Point University, where she leverages seven years of middle school teaching experience to inform her academic work. Her research centers on curriculum implementation and the effectiveness of Number Talks in mathematics education.