

**High Leverage Practices: A Framework for Effective Mathematics Instruction**

**[How to Use this Resource](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/cmarti82_gmu_edu/EVkTN5dfZGtHj0d_GZxxWMwBgVLIn9g3Y-IIs2qUJUJtFA?e=2VpQEg)**

| **High Leverage Practice (HLP)****Application to Mathematics** | **Professional Learning** | **Resources** |
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| **Section 1:** | **HLPs for Mathematics and Collaboration**  |  |
| **HLP 1:** [Collaborate with professionals to increase student success](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/EWrt4VEmSlBLmkjGnkPNevcBO17XNtPgPBpydpzEvmNQ7g?e=niN7L1) | The Progress Center [The IEP Team and Other Considerations](https://promotingprogress.org/training/iep-team-whos-who-and-other-considerations)[TTAC HLP 1 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS77n8SA6lK7xng/Resource-hlp-highlight-tool---hlp-1-collaborate-with-professionals-to-increase-student-success) | William & Mary TTAC (2016) [Co-Teaching Considerations Packet](https://education.wm.edu/centers/ttac/documents/packets/coteaching.pdf)VDOE [Co-Teaching Math Instructional Plans](https://www.doe.virginia.gov/teaching-learning-assessment/k-12-standards-instruction/mathematics/instructional-resources/co-teaching-mathematics-instructional-plans-mips)Stetson & Associates (2022) [Quality Indicators for Delivering Specially Designed Instruction](https://ttaconline.org/Resource/JWHaEa5BS75hWwuKlcannQ/Resource-quality-indicators-for-delivering-specially-designed-instruction-sdi-stetson--associates-inc)[Stetson & Associates Educator Resources](https://stetsonassociates.com/resource-library/#para-ed-resources)[University of Colorado Paraeducators Collaboration Resources (paracenter.org)](https://paracenter.org/library/k-12-paraprofessional-supervision-resources) TTAC [Pro-Active Paraeducators Discussions](https://docs.google.com/document/d/1F1p0sNe536VMfBcyQWRQbgL50j6-XjeF/edit?usp=sharing&ouid=101943812360026249408&rtpof=true&sd=true)  |
| **HLP 2:** [Organize and facilitate effective meetings with professionals and families](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/EbAM65EQXG1Igbo-EeSsTi8BkZT0uzNl8rJj6NfdOcSWnQ?e=6HleQe) | VDOE Online Training [Meaningful IEP Meetings](https://virtualvirginia.instructure.com/courses/14354/pages/meaningful-iep-meetings?module_item_id=4227848)TTAC [HLP 2 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS745M7Ng48jalQ/Resource-hlp-highlight-tool---hlp-2-organize-and-facilitate-effective-meetings-with-professionals-and) | TTAC [HLP 2: Organize and Facilitate Effective Meetings with Professionals and Families](https://ttaconline.org/Resource/JWHaEa5BS745M7Ng48jalQ/Resource-hlp-highlight-tool---hlp-2-organize-and-facilitate-effective-meetings-with-professionals-and)  TTAC [HLP 2 Facilitating Collaborative IEP Meetings Checklist](https://ttaconline.org/Resource/JWHaEa5BS757ec5_RYxY0A/Resource-facilitating-collaborative-iep-meetings-vdoe-ttac-at-gmu) |
| **HLP 3:** [Collaborate with families to support student learning and secure needed services](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/EUtsxD2FDp1IviLnMRFO_rgBtEegUw8OEtYjAbxcwQXYRw?e=ZnfhHd) | VDOE: [Mathematics Resources for Families and Communities](https://www.doe.virginia.gov/teaching-learning-assessment/k-12-standards-instruction/mathematics/resources-for-families-communities)VDOE [Special Education for Families](https://www.doe.virginia.gov/programs-services/special-education/information-for-families)Meadows Center for Preventing Educational Risk (MCPER) at the University of Texas [Helping your Kid with Math [Videos]](https://ttaconline.org/Resource/JWHaEa5BS77npJsQIXwKUw/Resource-helping-your-kid-with-videos-for-families---math-topics-mcper) CEEDAR Center Practice Based Learning Opportunity [Using Simulation Environments for HLP 3: Collaborate with families to support student learning and secure needed services.](https://ceedar.education.ufl.edu/portfolio/using-simulation-environments-for-hlp-3/)Project for Education Research that Scales (PERTS): [Growth Mindset Course for Parents](https://www.mindsetkit.org/growth-mindset-parents)TTAC [Supports for Students with Significant Cognitive Disabilities](https://ttaconline.org/Resource/JWHaEa5BS755R4H7biFLpg/Resource-supports-for-students-with-significant-cognitive-disabilities-may-20-2020-newsletter--training-) IRIS Center Modules – [Family Engagement. Collaborating with Families who have Students with Disabilities](https://iris.peabody.vanderbilt.edu/module/fam/)Center for Dispute Resolution (CADRES)  [Working Together](https://www.cadreworks.org/resources/cadre-materials/working-together-series) Self-Paced Professional Learning[TTAC HLP3 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS75C2wBoX1scOA/Resource-hlp-highlight-tool---hlp-3-collaborate-with-families-to-support-student-learning-and-secure-needed) | VDOE & GMU [Bridging for Math Strength Family Connections](https://www.mathstrength.org/about/family-connections)TTAC [HLP 3 Family Communication Checklist](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/cmarti82_gmu_edu/EUxB84Z7mqZOto1slXul8r4Buht522STidGBoy8RLVmPng?e=2ILulJ)Institute for Education Sciences (IES)– REL Appalachia: [Engaging Families for Math Success](https://ies.ed.gov/ncee/edlabs/regions/appalachia/blogs/blog14_engaging-families-for-math-success.asp)  Stanford University [Family Math](https://familymath.stanford.edu/all-about-family-math/) |
| **Section 2:** | **HLPs for Assessment and Mathematics** |  |
| **HLP 4:** [Use multiple sources of information to develop a comprehensive understanding of students’ strengths and needs.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/ETIfYXM-a51AijQ0_-FER10BHrUu4LDIo3s-4K0_Wq9BSg?e=Clp8sU) | IRIS Center the [Pre-referral Process Supporting Students with Academic and Behavioral](https://iris.peabody.vanderbilt.edu/module/preref/) ConcernsIRIS Center [Developing High Quality Individualized Education Programs](https://iris.peabody.vanderbilt.edu/module/iep01/)Learner Variability Navigator Professional Learning [Students with Learning Disabilities, Dyscalculia, ADHD, Dyslexia](https://lvp.digitalpromiseglobal.org/topics/learning-disabilities-adhd-dyscalculia-dyslexia)TNTP [More than Right Answers: Math Instruction for Multilingual Learners](https://tntp.org/assets/set-resources/TNTP_Math_Instruction_for_MLLs.pdf) TTAC [HLP 4 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS77BL5Hh_ZLp_g/Resource-hlp-highlight-tool---hlp-4-use-multiple-sources-of-information-to-develop-a-comprehensive) | TTAC [HLP 4: Comprehensive Student Profile Graphic Organizer](https://drive.google.com/file/d/1C89565r-XUfygF29-QG4H-F57SxSbEsO/view?usp=sharing)TTAC [HLP 4 Comprehensive Student Profile Template](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/cmarti82_gmu_edu/ERzZP7ua0nxMtLimTjHsi7gByicKdoA42JaQ_50ybzdITg?e=MDLir9)Learner Variability Navigator* [Math Learner Factors K – 2](https://lvp.digitalpromiseglobal.org/content-area/math-pk-2/factors)
* [Math Learner Factors 3 - 6](https://lvp.digitalpromiseglobal.org/content-area/math-3-6/factors)
* [Math Learner Factors 7 - 10](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/factors)

[Mathematics Instructional Strategies for Students who are Deaf or Hard of Hearing](https://ttaconline.org/differentiated-instructional-strategies-deaf) VDOE [Virginia Guidelines for Educating Students with Learning Disabilities](https://www.doe.virginia.gov/home/showpublisheddocument/34622/638053221388800000)VDOE [Learning Disabilities in Mathematics](https://www.doe.virginia.gov/programs-services/special-education/specific-disabilities/learning-disability/learning-disabilities-in-mathematics)VDOE & GMU [Bridging for Math Strength Resources](https://www.mathstrength.org/home) |
| **HLP 5:** [Interpret and communicate assessment information with stakeholders to collaboratively design and implement educational programs.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/EdI6afDSy9dHmO-sGNGbH9UBMro-V1waAeq0DVkDTNjJAw?e=QwNPhg) | National Center on Intensive Intervention [Communicating Intensive Interventions with Families](https://intensiveintervention.org/sites/default/files/Intensive_Intervention_Practicioners_Guide-508.pdf)James Madison University [Reporting & Use of Assessment Results](https://www.jmu.edu/assessment/sass/ac-step-seven.shtml)TTAC [HLP 5 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS77pmPndMjk0vA/Resource-hlp-highlight-tool---hlp-5-interpret-and-communicate-assessment-information-with-stakeholders-to) | VDOE Models for Developing High [Quality Present Level of Academic Achievement and Functional Performance Descriptions and Goals in a Standards-Based Individualized Education Program](https://www.doe.virginia.gov/home/showpublisheddocument/28623/638046322710930000)National Center on Intensive Interventions [Student Progress Monitoring Tool for Data Collection & Graphing](https://intensiveintervention.org/resource/student-progress-monitoring-tool-data-collection-and-graphing-excel) |
| **HLP 6:** [Use student assessment data, analyze instructional practices, make necessary adjustments that improve student outcomes](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/ES-qAPC5-xZPgwTsC75dmoABieprZpSKMzUalc5MxLaz7g?e=RAzGWm) | CEEDAR Center [Math Interventions & MTSS Video (20:02 minutes)](https://youtu.be/0MNYdr_2YoQ)National Center on Intensive Interventions [Intensive Interventions in Mathematics Content](https://intensiveintervention.org/training/course-content/intensive-intervention-mathematics) IRIS Center [Progress Monitoring: Mathematics](https://iris.peabody.vanderbilt.edu/module/pmm/)GMU [Bridging for Math Strength Webinar Part 1 - Grades K-2](https://www.youtube.com/watch?v=6w3m8W9VYXM)GMU [Bridging for Math Strength Webinar Part 1 - Grades 3-8](https://www.youtube.com/watch?v=GbFKMol0uGM)Project Stair Mathematics [How to Interpret Progress Monitoring K- 12 [Video].](https://youtu.be/O3IPT5fX6YY) 4:26 minutesCEEDAR Center Practice Based Learning Opportunity [HLP 6 Simulation](https://ceedar.education.ufl.edu/portfolio/mixed-reality-simulation-for-hlp-6/)TTAC [HLP 6 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS77MpZxdn2Eq8g/Resource-hlp-highlight-tool---hlp-6-use-student-assessment-data-analyze-instructional-practices-and-make) | University of Florida CEEDAR Center [MTSS in Mathematics](https://ceedar.education.ufl.edu/cems/math/)National Center on Intensive Interventions [Screening Tools - Mathematics](https://charts.intensiveintervention.org/ascreening?_ga=2.103624773.433827833.1678293215-925284387.1638800328)National Center on Intensive Interventions [Student Progress Monitoring Tool for Data Collection & Graphing](https://intensiveintervention.org/resource/student-progress-monitoring-tool-data-collection-and-graphing-excel)Virginia Tech TTAC  [CRA Progress Monitoring Sheet](https://docs.google.com/document/d/1rxtPBebG8vdkXxfgqwyBLOjCMhauscdbHOa7B5X5ZdE/edit?usp=sharing)VDOE & GMU [Bridging for Math Strengths](https://www.mathstrength.org/)VDOE [Just in Time Mathematics Quick Checks](https://www.doe.virginia.gov/teaching-learning-assessment/k-12-standards-instruction/mathematics/instructional-resources/just-in-time-mathematics-quick-checks) |
| **Section 3:** | **HLPs for Social/Emotional/Behavioral Practices and Literacy**  |  |
| **HLP 7:** [Establish a consistent, organized, and respectful learning environment.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/Ec76wcu0uV5Om6dqz99vg_IBR3dDz1_8N6Nqkas1r6onkw?e=RSS5fu) | Project Stair [Mathematics Procedures Routines [Video]](https://youtu.be/lWgeenPQyRQ). 2:24 minutes Project Stair [Introduction to Classroom Management for Mathematics [Video]](https://youtu.be/nY76WcssGaw). 3:58 minutesProject Stair [Class Expectations in Mathematics [Video]](https://youtu.be/4_lE0lymzoE). 4:49 minutes NCTM [Thinking About Instructional Routines in Mathematics](https://www.nctm.org/uploadedFiles/Conferences_and_Professional_Development/Webinars_and_Webcasts/Thinking-about-Instructional-Routines-in-Mathematics-Teaching-and-Learning-Presentation.pdf)Stanford University [Math Language Routines](https://ul.stanford.edu/sites/default/files/resource/2021-11/Principles%20for%20the%20Design%20of%20Mathematics%20Curricula_1.pdf)Learner Variability Project (Mathematics) Webinar [Culturally Responsive Teaching: Strategies So All Learners Are Seen and Understood](https://home.edweb.net/webinar/personalizedlearning20190923/)TTAC Self-Paced Professional Learning on Virtual Virginia [Setting the Stage for Learning – Establish a Consistent, Organized, and Respectful Learning Environment](https://virtualvirginia.org/pl/ttac-22/)TTAC [HLP 7 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS75qK5b_Xe0MuQ/Resource-hlp-highlight-tool---hlp-7-establish-a-consistent-organized-and-respectful-learning-environment) | TTAC [HLP #7 Checklist](https://ttaconline.org/Resource/JWHaEa5BS74ozkSjhgK7Pw/Resource-rubric--hlp-7-establish-a-consistent-organized-and-respectful-learning-environment-vdoe-ttac-at) Stanford University PERTS Center [teacher toolkit](https://www.mindsetkit.org/)  Youcubed [Positive Norms to set up your class for growth mindset](http://www.youcubed.org/wp-content/uploads/Positive-Classroom-Norms2.pdf) Learner Variability Project (Mathematics) [Culturally Responsive Practices](https://lvp.digitalpromiseglobal.org/topics/culturally-responsive-practice) Henrico County Public Schools [Types of Number Sense Routines](https://sites.google.com/henrico.k12.va.us/hcps-elementary-math-routines/types-of-routines?authuser=0) Henrico County Public Schools [Number Sense Routines K - Secondary](https://sites.google.com/henrico.k12.va.us/hcps-elementary-math-routines/home) |
| **HLP 8:** [Provide positive and constructive feedback to guide students’ learning and behavior.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/EdBG8gvaJwtMgV_-vW9iJMwB2lMx5GfjpgtgsB8L_A2Gkw?e=R9sG0c) | The IRIS Center [Addressing Problem Behaviors (Part 2 Elementary School) Behavioral Strategies](https://iris.peabody.vanderbilt.edu/module/bi2-elem/)The IRIS Center [Classroom Behavior Management (Part 2 Elementary)](https://iris.peabody.vanderbilt.edu/module/beh2_elem/)Project for Education Research that Scales (PERTS) Self-Paced Professional Learning [Elevate Student Voice in Learning](https://www.perts.net/elevate)The IRIS Center [Addressing Problem Behaviors (Part 1 Elementary School) Understanding the Acting Out Cycle](https://iris.peabody.vanderbilt.edu/module/bi1-elem/) TTAC [HLP 8 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS76valcOYYSM7g/Resource-hlp-highlight-tool---hlp-8--22-provide-positive-and-constructive-feedback-to-guide-students) | Stanford University [Youcubed](https://www.youcubed.org/resource/growth-mindset/)Learner Variability Navigator [Model Positive Connections to Mathematics](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/model-positive-connections-to-math-math-7-10/summary) |
| **HLP 9:** [Teach Social Behaviors](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/EcN7z9GzSkdCiECLpOOAtc8BWfgLZAlO73LeT5kA-e8Hqg?e=otswe8) | University of Texas [Social & Emotional Learning in Mathematics](https://www.insidemathematics.org/common-core-resources/mathematical-practice-standards/social-and-emotional-mathematics-learning)University of Texas, Meadows Center [Ten Key Policies & Practices of Social and Emotional Learning](https://meadowscenter.org/resource/10-key-policies-and-practices-for-social-emotional-learning/) LD@Schools [Supporting the Wellbeing & Mental Health of Students with Learning Disabilities Self-Paced Professional Learning](https://www.ldatschool.ca/learning-modules/mental-health-integra/overview/)Youcubed [Growth Mindset Self-Paced Professional Learning for Educators](https://ttaconline.org/Resource/JWHaEa5BS75naDRZcGVxMQ/Resource-online-courses-for-teachers---math-youcubed-stanford-graduate-school-of-education)[HLP 9 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS76valcOYYSM7g/Resource-hlp-highlight-tool---hlp-8--22-provide-positive-and-constructive-feedback-to-guide-students) | Learner Variability Project (Mathematics) [Emotional & Relational Engagement Strategies](https://lvp.digitalpromiseglobal.org/my-workspaces/hQOJI7Apzb)Project for Education Research that Scales (PERTS) [Growth Mindset Curriculum for 9th Grade Students](https://www.perts.net/orientation/hg)  Project for Education Research that Scales (PERTS) [resources](https://www.perts.net/resources) Luminous Learning [Five Teaching Strategies to Build Growth Mindset](https://luminouslearning.com/blogs/sped-math/build-math-confidence)Khan Academy [Growth Mindset Activities](https://www.khanacademy.org/college-careers-more/learnstorm-growth-mindset-activities-us) |
| **HLP 10:** [Conduct functional behavioral assessments to develop individual student behavior support plans](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/ERcIPXjM-q5PvtWNEf6lwkQBV1qCuVkx79Rm5wWEUzpjfw?e=zEC52i). | IRIS Center [Functional Behavior Assessments Identifying the Reasons for Problem Behavior and Developing a Behavior Plan](https://iris.peabody.vanderbilt.edu/module/fba/) [VDOE Guidelines for Conducting Functional Behavioral Assessment and Developing Behavior Intervention and Supports/Strategies](https://www.doe.virginia.gov/home/showpublisheddocument/15644/638034223266870000)TTAC [HLP 10 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS74ZyBqmSSLcHA/Resource-hlp-highlight-tool---hlp-10-conduct-functional-behavioral-assessments-to-develop-individual-student) | Intervention Central [Self-Check Behavior Checklist](https://www.interventioncentral.org/tools/self-check-behavior-checklist-maker) |
| **Section 4:** | **HLPs for Literacy Instruction** |  |
| **HLP 11:** [Identify and prioritize long- and short-term goals](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/EUz4adFEYaNAs7OXBM4aqocBTQriE6vnX0N2gyytuuH9nw?e=3Klch6)  | VDOE [Standards Based IEP Goal Training](https://www.doe.virginia.gov/programs-services/special-education/technical-assistance-professional-development/e-learning/standards-based-iep)Progress Center [The What and Why of Academic and Functional Performance (PLAAFP)](https://promotingprogress.org/training/what-and-why-present-levels-academic-achievement-and-functional-performance-plaafp) Progress Center [The What and Why of Annual Measurable Goals](https://promotingprogress.org/training/what-why-measurable-annual-goals)VDOE [Quality Present Level of Academic Achievement and Functional Performance Descriptions and Goals in a Standards-Based Individualized Education Program](https://www.doe.virginia.gov/home/showpublisheddocument/28623/638046322710930000)TTAC [HLP 11 Highlight Tool](http://ttaconline.org/Resource/JWHaEa5BS74K1fdEJfbO6w/Resource-hlp-highlight-tool---hlp-11-identity-and-prioritize-long--and-short-term-goals) | TTAC [HLP 11 Checklist: Identify Short- & Long-Term Learning Goals](https://ttaconline.org/Resource/JWHaEa5BS76VDjWazacPxQ/Resource-hlp-11-checklist-identify-long--and-short-term-learning-goals-high-leverage-practices)VDOE [Skills Worksheets - Mathematics](https://www.doe.virginia.gov/programs-services/special-education/technical-assistance-professional-development/e-learning/standards-based-iep)[Bridging for Math Strength Learning Trajectory Resources](https://www.mathstrength.org/lt)  |
| **HLP 12:** [Systematically design instruction toward a specific learning goal.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/ESKeALBKRKVHiz8uUdKkL_MBjDk1HKSgemXQY60zMya1PQ?e=Nz1efj) | National Center on Intensive Interventions [Intensive Interventions in Mathematics Content](https://intensiveintervention.org/training/course-content/intensive-intervention-mathematics) The IRIS Center [High Quality Math Instruction: What Every Teacher Should Know](https://iris.peabody.vanderbilt.edu/module/math/)VDOE [Evidence Based Instruction in Mathematics Webinar](https://youtu.be/Db4eSGxBul4)LD@School [Concrete Representational Abstract Method Self-Paced Professional Learning](https://www.ldatschool.ca/learning-modules/cra-strategies/overview/)Project Stair T[eaching Math with Multiple Representations (5:45 minutes)](https://www.youtube.com/watch?v=XSnlcEg0X7g)TTAC [HLP 12 Highlight Tool](http://ttaconline.org/Resource/JWHaEa5BS761nSbuSkgJug/Resource-hlp-highlight-tool---hlp-12-systematically-designed-instruction) | VDOE [Evidence Based Specially Designed Instruction in Mathematics](https://www.doe.virginia.gov/home/showpublisheddocument/28625/638090424862930000)Evidence Based Intervention Network at the University of Missouri [Math Interventions and Strategies](https://education.missouri.edu/ebi/math-generalization/)Virginia Tech TTAC [Number Sense & Counting Principles](https://sites.google.com/vt.edu/math/number-sense-counting)Evidence Based Intervention Network at the University of Missouri [Concrete Representational Abstract (CRA)](https://education.missouri.edu/ebi/2014/01/30/concrete-representational-abstract-cra-2/)Virtual Manipulatives* [Didax Virtual Manipulatives](https://illuminations.nctm.org/)
* [EquatIO Activities Database](https://mautic.texthelp.com/equatio-activity-database)
* [Math Playground](https://www.mathplayground.com/)
* [Math Learning Center](https://www.mathlearningcenter.org/apps)
* [National Library of Virtual Manipulatives](http://nlvm.usu.edu/en/nav/vlibrary.html)
* [Toy Theatre](https://toytheater.com/category/teacher-tools/virtual-manipulatives/)

National Center on Intensive Interventions [Planning Standards Aligned within a Multi-Tiered System of Supports](https://intensiveintervention.org/sites/default/files/BasicFactsExample_508.pdf)Virginia Tech TTAC [Specially Designed Instruction (SDI) in Math](https://sites.google.com/vt.edu/math/planning-and-information) |
| **HLP 13:** [Adapt curriculum tasks and materials for specific learning goals.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/Ef4jrGiymQdGqKssdkTAN8YBla49G51m0yU1xOaGaMCi5Q?e=Rm8MMX) | The IRIS Center [Universal Design for Learning: Creating a Learning Environment that Engages All Students](https://iris.peabody.vanderbilt.edu/module/udl/) IRIS Center [Differentiated Instruction: Maximizing the Learning of All Students](https://iris.peabody.vanderbilt.edu/module/di/)The IRIS Center [Accommodations: Instructional and Testing Supports for Students with Disabilities](https://iris.peabody.vanderbilt.edu/module/acc/) TTAC [HLP 13 Highlight Tool](http://ttaconline.org/Resource/JWHaEa5BS75KFXw3IEGxmA/Resource-hlp-highlight-tool---hlp-13-adapt-curriculum-tasks-and-materials-for-specific-learning-goals) | [VDOE Virginia Alternate Assessment Program](https://www.doe.virginia.gov/teaching-learning-assessment/student-assessment/virginia-sol-assessment-program/virginia-alternate-assessment-program-vaap) [TTAC Virginia Essentialized Standards of Learning Resources](https://ttaconline.org/vesol)Virginia Tech TTAC [Virginia Essentialized Standards of Learning Documents & Resources](https://sites.google.com/vt.edu/math/vesol-virginia-essentialized-standards-of-learning?authuser=0)Perkins School for the Blind [Digitally Accessible Worksheets](https://ttaconline.org/Resource/JWHaEa5BS74drkj975AToQ/Resource-digitally-accessible-math-worksheets-perkins-school-for-the-blind-elearning) VDOE & GMU [Bridging for Math Strengths](https://www.mathstrength.org/) |
| **HLP 14:** [Teach cognitive and metacognitive strategies to support learning and independence.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/ERmMNda5eYRDoMKric_ySQEBrtsRgwG05sxu7_8OKy4slA?e=dTXdcx) | VDOE [Schema Based Instruction Webinar](https://www.youtube.com/watch?v=N14Xz1d8DlE)IRIS Center [SRSD Using Learning Strategies to Enhance Student Learning](https://iris.peabody.vanderbilt.edu/module/srs/)IRIS Center [High Quality Math Instruction: What Every Teacher Should Know](https://iris.peabody.vanderbilt.edu/module/math/)TTAC [Word Problem, No Problem! Webinar with UVA professor, Dr. Stephanie Morano](https://ttaconline.org/Resource/JWHaEa5BS76NDhITomhYUw/Resource-word-problems-no-problem-ttac-william--mary) (23 minutes) TTAC [HLP 14 Highlight Tool](http://ttaconline.org/Resource/JWHaEa5BS74TsOgKn5ZScg/Resource-hlp-highlight-tool---hlp-14-teach-cognitive-and-metacognitive-strategies-to-support-learning-and) | VDOE [Evidence Based Specially Designed Instruction in Mathematics](https://www.doe.virginia.gov/home/showpublisheddocument/28625/638090424862930000)Evidence Based Intervention Network at the University of Missouri [Schema Based Instruction](https://mailmissouri.sharepoint.com/sites/MUCEDUCStrategicCommunications-Ogrp/Shared%20Documents/Forms/AllItems.aspx?id=%2Fsites%2FMUCEDUCStrategicCommunications%2DOgrp%2FShared%20Documents%2FMizzou%20Ed%20Website%2FMizzou%20Ed%20Website%2FWebsite%20documents%2FESCP%2FEBI%2FEBI%2DBrief%2DTemplate%2DSchema%2DBased%2DInstruction%2Dadd%2DFINAL1%2Epdf&parent=%2Fsites%2FMUCEDUCStrategicCommunications%2DOgrp%2FShared%20Documents%2FMizzou%20Ed%20Website%2FMizzou%20Ed%20Website%2FWebsite%20documents%2FESCP%2FEBI&p=true&ga=1)Virginia Tech TTAC [Schema Based Instruction for Problem Solving](https://sites.google.com/vt.edu/math/schema)Instructional Technology [Mathshare (Multi-Step)](https://benetech.org/our-work/mathshare/?gclid=Cj0KCQiAgaGgBhC8ARIsAAAyLfH29Ll9uF9jy0BjEepQSWm3sxoeJOnhwxmpPBLc1mSQY5vUFZ68SnAaAuN7EALw_wcB)  |
| **HLP 15:** [Provide scaffolding support.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/msekinge_gmu_edu/ERqXl3L_6cdKibVv0vfysooBGksejJfsrHxYlBqTkQ5_jA?e=fKnci3) | IRIS Center [Providing Instructional Supports: Facilitating the Mastery of New Skills](https://iris.peabody.vanderbilt.edu/module/sca/) Project Stair [Mathematics Examining Task Difficulties [Video]](https://youtu.be/O_2RpSsmhmk). 3:17 minutesThoughtco [Frayer Model for Math](https://www.thoughtco.com/the-frayer-model-for-math-2312085)TTAC [HLP 15 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS77QE91wc1tSUw/Resource-hlp-highlight-tool---hlp-15-provide-scaffolded-supports) | VDOE [Mathematics Word Wall Cards](https://www.doe.virginia.gov/teaching-learning-assessment/k-12-standards-instruction/mathematics/instructional-resources/mathematics-vocabulary-word-wall-cards)[VDOE Mathematics Instructional Enhancements for Diverse Learners Infographic](https://vdoe.prod.govaccess.org/home/showdocument?id=23273)[VDOE Mathematics Vertical Articulation Tool](https://www.doe.virginia.gov/teaching-learning-assessment/k-12-standards-instruction/mathematics/instructional-resources/algebra-readiness-initiative/mathematics-vertical-articulation-tool-mvat)[VDOE Mathematics Bridging Standards](https://www.doe.virginia.gov/teaching-learning-assessment/instruction/mathematics/instruction)Understood.org [Graphic Organizers for Mathematics](https://ttaconline.org/Resource/JWHaEa5BS74n45ydc56gWA/Resource-download-graphic-organizers-to-help-kids-with-math-understoodorg)Fostering Math Practices [Connecting Representations](http://www.fosteringmathpractices.com/connecting-representations/) New York State Department of Education (NYSDE)[Supporting All Students Resource Guides for Scaffolding Instruction of English Language Arts and Mathematics](http://www.nysed.gov/curriculum-instruction/supporting-all-students-resource-guides-scaffolding-instruction-english)Kentucky Center for Mathematics [Math Tools](https://www.kentuckymathematics.org/math_tools.php)[Free Frayer Model Template in Google docs](https://docs.google.com/document/d/1XZ6bCh_2TCj742AN1pdGb4djTyFNNbAMevEGvLID8jE/copy)WATI [Math Desk Helper Scaffolds](http://www.wati.org/classroom-materials/math-desk-helpers/)Learner Variability Project [Worked Solutions](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/worked-examples-math-7-10/summary) |
| **HLP 16:** [Use explicit instruction.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/EQvuX7WJqPJFkcPpxGnURakBkUxs4ia2-GaqswFLQKsEMQ?e=JDJoN7) | VDOE [Evidence Based Specially Designed Instruction in Mathematics Webinar](https://www.youtube.com/watch?app=desktop&v=Db4eSGxBul4&feature=youtu.be)National Center on Intensive Interventions [Features of Explicit Instruction](https://intensiveintervention.org/training/course-content/explicit-instruction)Project Stair Mathematics [How to Adjust Scope and Sequence – K- 12 [Video].](https://you-tu.be/f-B_Zq-vPYM) 3:47 minutesLD Online [Thinking Aloud in Mathematics](https://www.ldonline.org/ld-topics/teaching-instruction/thinking-aloud-mathematics)VDOE [#GoOpenVA Information Videos](https://www.doe.virginia.gov/teaching-learning-assessment/k-12-standards-instruction/goopenva)University of Texas, Meadows Center [Ten Key Math Practices for All Elementary Schools](https://meadowscenter.org/resource/10-key-mathematics-practices-for-all-elementary-schools-with-strong-evidence-of-effectiveness-from-high-quality-research/)University of Texas, Meadows Center T[en Key Math Practices for All Middle and High Schools](https://meadowscenter.org/resource/10-key-math-practices-for-all-middle-and-high-schools-with-strong-evidence-of-effectiveness-from-high-quality-research/)Department of Education Resources* Department of Education Institutes for Education Sciences [Preparing Young Children for School](https://ies.ed.gov/ncee/wwc/PracticeGuide/30)
* Department of Education Institutes for Education Sciences [Five Evidence-Based Recommendations for Teaching Mathematics to Young Children](https://ies.ed.gov/ncee/wwc/Docs/practiceguide/wwc_empg_numbers_020714.pdf)
* Department of Education Institutes for Education Sciences [Assisting Students Struggling with Mathematics: Intervention in the Elementary Grades](https://ies.ed.gov/ncee/wwc/PracticeGuide/26)
* Department of Education Institutes for Education Sciences [Improving Mathematical Problem Solving in Grades 4 – 8](https://ies.ed.gov/ncee/wwc/PracticeGuide/16).
* Department of Education Institutes for Education Sciences [Teaching Strategies for Improving Algebra Knowledge of Middle and High School Students](https://ies.ed.gov/ncee/wwc/PracticeGuide/20)

National Center on Intensive Interventions [Teaching Counting](https://ttaconline.org/Resource/JWHaEa5BS77y26-Yf0RWrA/Resource-teaching-counting-national-center-on-intensive-intervention-ncii) Kansas Technical Assistance Network [Dr. Brad Witzel – Rational Number Acquisition (8:48 minutes)](https://www.ksdetasn.org/resources/1345)Kansas Technical Assistance Network [Dr. Brad Witzel – Building Computational Fluency Webinar (61 minutes)](https://www.ksdetasn.org/resources/2902)[Dr. Brad Witzel CRA with Explicit Instruction in Fractions (4:25 minutes)](https://youtu.be/_D_93UGRL58)Evidence Based Intervention Network at the University of Missouri [Fluency Building: (Small Group) Cover Copy Compare](https://education.missouri.edu/ebi/2011/04/12/cover-copy-compare/)IRIS Center [Explicit Instruction and Think Aloud in Mathematics (with elementary and video examples](https://iris.peabody.vanderbilt.edu/module/math/cresource/q2/p04/))TTAC [HLP 16 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS75xIzvl0Fcv-g/Resource-hlp-highlight-tool---hlp-16-use-explicit-instruction) | Research & Evidence Based Practices * VDOE [Evidence Based Specially Designed Instruction in Mathematics](https://www.doe.virginia.gov/home/showpublisheddocument/28625/638090424862930000)

Strategic Instructional Planning* VDOE [Co-Teaching Math Instructional Plans](https://www.doe.virginia.gov/teaching-learning-assessment/k-12-standards-instruction/mathematics/instructional-resources/co-teaching-mathematics-instructional-plans-mips)
* VDOE Repository of Lesson Plans and Resources [#GoOpenVA](https://goopenva.org/)
* VDOE [Mathematics Word Wall Cards](https://www.doe.virginia.gov/teaching-learning-assessment/k-12-standards-instruction/mathematics/instructional-resources/mathematics-vocabulary-word-wall-cards)
* VDOE & GMU [Bridging for Math Strengths](https://www.mathstrength.org/)
* VDOE [Just in Time Quick Checks](https://www.doe.virginia.gov/teaching-learning-assessment/k-12-standards-instruction/mathematics/instructional-resources/just-in-time-mathematics-quick-checks)
* Henrico County Public Schools [Mathematics Website with Lesson Plans, Activities and Resources](https://sites.google.com/henrico.k12.va.us/hcpsmathematics/home)

Intervention Central [Cover Copy Compare](https://www.interventioncentral.org/academic-interventions/math-facts/how-master-math-facts-cover-copy-compare)CEC [HLP 16 Checklist: Explicit Instruction](https://ttaconline.org/Resource/JWHaEa5BS74Th4roZsxqhg/Resource-hlp-16-checklist-explicit-instruction-high-leverage-practices-implementation-guide) |
| **HLP 17:** [Use flexible grouping.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/msekinge_gmu_edu/EUOV0Yh2RIRKmFuGzNPTQrABeULCqgLtTbrUPxX2EmRQAA?e=pMgI66) | Project Stair Mathematics [How to Group Students K-12 [Video].](https://you-tu.be/ROI-1AJ0RVU) 2:56 minutesProject Stair Mathematics [Activity Sequencing & Offering Choice [Video]](https://youtu.be/RwH1cl89d4k). 2:29 minutesEdutopia [Group Work that Works](https://www.edutopia.org/article/group-work-works)Henrico County Public Schools (Mathematics) [Planning Stations](https://sites.google.com/henrico.k12.va.us/hcps-elementary-math-routines/best-practices/learning-stations?authuser=0)Evidence Based Intervention Network at the University of Missouri [Mathematics Peer Assisted Learning Strategies (PALS)](https://mailmissouri.sharepoint.com/sites/MUCEDUCStrategicCommunications-Ogrp/Shared%20Documents/Forms/AllItems.aspx?id=%2Fsites%2FMUCEDUCStrategicCommunications%2DOgrp%2FShared%20Documents%2FMizzou%20Ed%20Website%2FMizzou%20Ed%20Website%2FWebsite%20documents%2FESCP%2FEBI%2FEBI%2DBrief%2DTemplate%2DMath%2DPALS%2Epdf&parent=%2Fsites%2FMUCEDUCStrategicCommunications%2DOgrp%2FShared%20Documents%2FMizzou%20Ed%20Website%2FMizzou%20Ed%20Website%2FWebsite%20documents%2FESCP%2FEBI&p=true&ga=1)TTAC Self-Paced Professional Learning on Virtual Virginia [HLP 17 Differentiate with Flexible Grouping](https://virtualvirginia.org/pl/ttac-22/)TTAC [HLP 17 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS77TClINXJcjFg/Resource-hlp-highlight-tool--hlp-17-use-flexible-grouping) | TTAC [Types of Flexible Groups](https://ttaconline.org/Resource/JWHaEa5BS75pPS88qEWTiw/Resource-types-of-flexible-groups-vdoe-ttac-at-gmu)TTAC [Flexible Group Lesson Plan Template](https://ttaconline.org/Resource/JWHaEa5BS76Kd0YCH3K1OQ/Resource-hlp-17-small-flexible-grouping-lesson-planning-template-vdoe-ttac-at-gmu) – MathematicsHenrico County Public Schools [Math Workshop](https://sites.google.com/henrico.k12.va.us/hcps-elementary-math-routines/best-practices/math-workshop?authuser=0)[Wisconsin Department of Public Institute: Flexible Groups](https://dpi.wi.gov/sites/default/files/imce/cal/pdf/flexible-grouping.pdf)Learner Variability Navigator [Flexible Grouping](https://lvp.digitalpromiseglobal.org/content-area/adult-learner/strategies/flexible-grouping-adult-learner/summary)Learner Variability Navigator Group Activities:* [Think Pair Share - Mathematics](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/think-pair-share-math-7-10/summary)
* [Reciprocal Teaching](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/reciprocal-teaching-math-7-10/summary)
* [Jigsaw (Mathematics)](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/jigsaw-math-7-10/summary)
* [Gallery Walk](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/gallery-walk-math-7-10/summary)
* [Collaborative Problem Solving](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/collaborative-problem-solving-math-7-10/summary)
* [Student Choice - Mathematics](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/student-choice-math-7-10/summary)

NCTM Illuminations [Website with pre-created games](https://illuminations.nctm.org/allgames.aspx) |
| **HLP 18:** [Use strategies to promote active student engagement.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/EQOuEueK7adBvcBNhjhZ5TEBf7Ib1yxZxSwl7hJ6W281pg?e=HluiQu) | Project Stair Mathematics [How to Ask the Right Questions in Mathematics [Video](https://www.youtube.com/watch?v=fUFZ2-bSWHc)]. 5:26 minutesProject Stair Mathematics [How to Ask Higher Level Mathematics Questions Part 2 [Video]](https://youtu.be/dc3yGhzDA0k) 4:26 minutesProject Stair Mathematics T[eacher Questions and Opportunities to Respond [Video].](https://youtu.be/aiHa5arszLg) 2:07 minutesWe are Teachers [Eight Ways to Pose Better Questions in Math Classes](https://www.weareteachers.com/8-ways-to-pose-better-questions-in-math-class/)Illustrative Mathematics [Mathematical Language Routines](https://illustrativemathematics.org/wp-content/uploads/2019/04/MLR-Presentation-Craig-Sadie-Vanessa.pdf)Avid [Ten Engagement Strategies for Every Math Classroom](https://ttaconline.org/Resource/JWHaEa5BS74RCUU2DIVk5g/Resource-10-high-engagement-strategies-for-every-math-class-avid)Stanford University [Promoting Language & Content Development](https://ul.stanford.edu/sites/default/files/resource/2021-11/Principles%20for%20the%20Design%20of%20Mathematics%20Curricula_1.pdf)TTAC Self-Paced Professional Learning on Virtual Virginia [HLP 18 Active Engagement Strategies](https://virginialearning.beta.catalog.instructure.com/courses/active-engagement-strategies-hlp-18---summer-2022)TTAC [HLP 18 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS74-lxz8SOewxw/Resource-hlp-highlight-tool---hlp-18-use-strategies-to-promote-active-student-engagement) | TNTP [Student Engagement Survey & Scoring](https://tntp.org/student-experience-toolkit/view/student-engagement-survey)Learner Variability Project (Mathematics) [Fostering Student Engagement](https://lvp.digitalpromiseglobal.org/my-workspaces/hQOJI7Apzb)Learner Variability Navigator [Math Talks](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/math-talks-math-7-10/summary)VDOE [Rich Mathematical Tasks](https://www.doe.virginia.gov/teaching-learning-assessment/k-12-standards-instruction/mathematics/professional-development/2019-mathematics-sol-institutes)Teacher Education by Design [Contemplate then Calculate.](https://tedd.org/contemplate-calculate-submitted-bpes-boston-teacher-residency-program/) Kentucky Center for [Mathematics Number Talks Resources](https://kentuckymathematics.org/number_talk_resources.php)Learner Variability Navigator [Guided Inquriy](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/guided-inquiry-math-7-10/summary)Learner Variability Navigator [Student-generated Problems](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/student-generated-problems-math-7-10/summary)Learner Variability Navigator [Music & Dance – Mathematics Engagement](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/music-dance-math-7-10/summary)VDOE & GMU [Bridging for Math Strengths](https://www.mathstrength.org/)VDOE [Mathematics Word Wall Cards](https://www.doe.virginia.gov/teaching-learning-assessment/k-12-standards-instruction/mathematics/instructional-resources/mathematics-vocabulary-word-wall-cards)VDOE D[esmos Activities Log](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.doe.virginia.gov%2Fhome%2Fshowpublisheddocument%2F3210%2F637982539964170000&wdOrigin=BROWSELINK) |
| **HLP 19:** [Use assistive and instructional technologies.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/EcmDn652XI9ImRtCXwkbg7QBAu4QiP2CvrE9iNZ34M91pQ?e=00gdxw) | VDOE [Putting the “AT” in mATh: Making Math More Accessible with Assistive Technology](https://ttaconline.org/Online-Training/MLbTE3FyBnEXUrJDLN_F8YJuuE_NCwTJ/Online-Training-techknowledgy-2020-21-putting-the-at-in-math-making-math-more-accessible-with-assistive)  [VDOE Mathematics Desmos Webinars](https://www.doe.virginia.gov/teaching-learning-assessment/instruction/mathematics/standards-of-learning-for-mathematics/desmos-online-calculator)The IRIS Center [Assistive Technology: An Overview](https://iris.peabody.vanderbilt.edu/module/at/)[Virginia Assistive Technology, Tools, and Strategies: Consideration and Assessment Guidance Document](https://www.doe.virginia.gov/home/showpublisheddocument/28719/638098113756500000)TTAC [HLP 19 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS7656jLDw5CI8Q/Resource-hlp-highlight-tool---hlp-19-use-assistive-and-instructional-technologies) | Georgia Department of Education [Assistive Technology Devices for Students Struggling in Mathematics](http://archives.gadoe.org/DMGetDocument.aspx/Math_Chart_revised_8-10.pdf?p=6CC6799F8C1371F6CFC3EAE26FFD23831AA37596E6C907F54E26E070D9A5463C&Type=D)National Center on Educational Accessible Materials - [Mathematics](https://ttaconline.org/Resource/JWHaEa5BS753RcoemRFpog/Resource-teaching-accessible-math-national-center-on-accessible-educational-materials)Learner Variability [Project Audio & Braille](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/rich-resources-audio-braille-math-7-10/summary)UDL [Math Tools](https://ttaconline.org/Resource/JWHaEa5BS74OPEplcjZGtQ/Resource-udl-tech-toolkit-math-tools)[Tapping Into Low-Tech Ideas: Literacy & Math](https://ttaconline.org/Online-Training/MLbTE3FyBnEj-DeYNo4LcfeaVjDajeuM/Online-Training-tapping-into-low-tech-ideas-literacy--math)Math Technologies[Desmos Online Calculator](http://ttaconline.org/Resource/JWHaEa5BS74nd1Y_rUxDaQ/Resource-desmos-online-calculator-virginia-department-of-education-vdoe) [EquatIO: Make Math Digital](https://ttaconline.org/Resource/JWHaEa5BS74mGaZqY8uKqw/Resource-equatio-make-math-digital) [Graspable Math](https://ttaconline.org/Resource/JWHaEa5BS74VXoj3WCzwqw/Resource-graspable-math) [GeoGebra Geometry](https://ttaconline.org/Resource/JWHaEa5BS74iiis2iVv0WQ/Resource-geogebra-geometry) [Mathshare (Multi-Step)](https://benetech.org/our-work/mathshare/?gclid=Cj0KCQiAgaGgBhC8ARIsAAAyLfH29Ll9uF9jy0BjEepQSWm3sxoeJOnhwxmpPBLc1mSQY5vUFZ68SnAaAuN7EALw_wcB)Virtual Manipulatives* [Didax Virtual Manipulatives](https://illuminations.nctm.org/)
* [EquatIO Activities Database](https://mautic.texthelp.com/equatio-activity-database)
* [Math Playground](https://www.mathplayground.com/)
* [Math Learning Center](https://www.mathlearningcenter.org/apps)
* [National Library of Virtual Manipulatives](http://nlvm.usu.edu/en/nav/vlibrary.html)
* [Toy Theatre](https://toytheater.com/category/teacher-tools/virtual-manipulatives/)
 |
| **HLP 20:** [Provide intensive instruction.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/EVmDNyb8kltPqPozBCsFskkBbFyyaR-Icd6Xcm-V28cgYg?e=BWKjoX) | National Center on [Intensive Intervention Intensive Intervention in Mathematics](https://intensiveintervention.org/training/course-content/intensive-intervention-mathematics) The IRIS Center [Intensive Intervention (Part 1)](https://iris.peabody.vanderbilt.edu/module/dbi1/) The IRIS Center [Intensive Intervention (Part 2)](https://iris.peabody.vanderbilt.edu/module/dbi2/) Progress Center [Intensifying Instruction: What Teachers Need to Know](https://promotingprogress.org/training/intensifying-instruction) Project Stair Mathematics [Intervention Intensification Guide](https://cpb-us-w2.wpmucdn.com/blog.smu.edu/dist/1/303/files/2022/01/Intensification-Guide_Final.11.23.21.pdf) [HLP 20 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS76HgN-1Q2Eo1Q/Resource-hlp-highlight-tool---hlp-20-provide-intensive-instruction) | National Center on Intensive Interventions [Sample Lessons for Intensifying Interventions](https://intensiveintervention.org/implementation-intervention/math-lessons)National Center on Intensive Interventions [Student Progress Monitoring Tool for Data Collection & Graphing](https://intensiveintervention.org/resource/student-progress-monitoring-tool-data-collection-and-graphing-excel)Virginia Tech TTAC [CRA Progress Monitoring Sheet](https://docs.google.com/document/d/1rxtPBebG8vdkXxfgqwyBLOjCMhauscdbHOa7B5X5ZdE/edit?usp=sharing) |
| **HLP 21:** [Teach students to maintain and generalize new learning across time and settings.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/EeBxIEhe1MRGmeWelTUbhU0Bxc9g2rnfp6z9KrhAj3E1BQ?e=teHgUi) | Dr. Michael Kennedy [HLP 21 Video](https://vimeo.com/563774414)TTAC [HLP 21 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS76qPaCxrNkJag/Resource-hlp-highlight-tool-hlp-21-teach-students-to-maintain-and-generalize-new-learning-across-time-and) | Evidence Based Intervention Network at the University of Missouri [Math Generalizations](https://education.missouri.edu/ebi/math-generalization/)Fostering Math Practices [Recognizing Repetitions](http://www.fosteringmathpractices.com/routinesforreasoning/recognizing-repeptition/) Learner Variability Navigator [Real World Math](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/real-world-math-math-7-10/summary) |
| **HLP 22:** [Provide positive and constructive feedback to guide students’ learning and behavior.](https://gmuedu-my.sharepoint.com/%3Aw%3A/g/personal/mgerry_gmu_edu/EfJb9lhnynZMjxF0hVhE9YcBSv9SXKez3YxA9uh1m1OxyA?e=iSha1j) | Project Stair [Positive Feedback – Mathematics [Video]](https://youtu.be/dus-2Wa0ilY). 4:39 minutesIRIS Center [Page 7: Error Analysis for Mathematics](https://iris.peabody.vanderbilt.edu/module/dbi2/cresource/q2/p07/)TTAC [HLP 22 Highlight Tool](https://ttaconline.org/Resource/JWHaEa5BS76valcOYYSM7g/Resource-hlp-highlight-tool---hlp-8--22-provide-positive-and-constructive-feedback-to-guide-students) | IRIS Center [Mathematics: Identifying & Addressing Student Errors](https://iris.peabody.vanderbilt.edu/wp-content/uploads/pdf_case_studies/ics_matherr.pdf)Learner Variability Navigator [Error Analysis](https://lvp.digitalpromiseglobal.org/content-area/math-7-10/strategies/error-analysis-math-7-10/summary)MathVIDS [Error Pattern Analysis](http://fcit.usf.edu/mathvids/strategies/erroranalysis.html)[VDOE Just in Time Mathematics Quick Checks Teacher Notes](https://www.doe.virginia.gov/teaching-learning-assessment/k-12-standards-instruction/mathematics/instructional-resources/just-in-time-mathematics-quick-checks) |

**Additional Resources to Support HLP Implementation:**

* TTAC [Virginia Professional Teaching Standards HLP Crosswalk](https://ttaconline.org/Resource/JWHaEa5BS76j9uLrOziG_A/Resource-virginia-professional-teaching-standards-and-high-leverage-practice-crosswalk--school-leaders-hlp) & TTAC [HLP Rubrics](https://ttaconline.org/Resource/JWHaEa5BS74yrEi-CH5S9Q/Resource-hlp-rubrics-1-2-3-4-6-7-8-9-12-13-14-15-16-17-18-20-22-vdoe-ttac-at-gmu)
* Stetson & Associates [Quality Indicators of Specially Designed Instruction](https://stetsonassociates.com/blog/quality-indicators-for-delivering-specially-designed-instruction%EF%BF%BC/)
* CEEDAR Center [HLP Self-Reflection Tool](https://ceedar.education.ufl.edu/wp-content/uploads/2021/07/HLP-Self-Assessment-Tools-Cover-Page-combined.pdf) & CEEDAR Center [HighLeveragePractices.org](https://highleveragepractices.org/)

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