

## Homework Committee Findings and Recommendations

## Presenters

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## Objectives

-Describe the process taken by the homework committee
-Identify findings in homework research
-Identify implications of research findings as well as best practices
-Highlight key information from parent, student, and teacher surveys
-Propose PASD homework guidelines for elementary, middle, and high school level
-Utilize findings and implications to validate the strengths of and facilitate the advancement of PASD homework practices

Process

## Process Details

Process included parent, student, staff
Sub-committees included: Research, Policy, Parent/Student Surveys, Teacher Survey
$2^{\text {nd }}$ Sub-Committees Elementary, Middle level and High School level


## PASD Homework Timeline

## December

## Administer

Survey
January
Examine what we
are Currently
Doing

## Questions that Guided the Process

What is our understanding of what homework is?
What are we currently doing with homework?
What is best practice?
What does the homework research tell us?
What are other school districts doing?

## Questions to Guide the Conversations...

-In developing guidelines for the $\qquad$ level what does the research tell us?
-What unique considerations should we think about for the ___level?
-As a committee, what procedures/guidelines did we like from other districts that would influence our thoughts about the $\qquad$ level?
-What information from the survey results, may impact our discussions about the $\qquad$ Level?

## Working Definition

Homework can be defined as purposeful tasks assigned to students by school teachers that are intended to be carried out during non-school hours.

Research Findings

## Overall topics in homework research vateroveranis

## Studies tend to focus on:

1) Time, not task
2) Groups of students, not individuals
3) Student behavior, not teacher behavior

## General Findings Summarized in Vatterott 2018

Categories

1) Impact of time spent doing homework
2) Homework effectiveness related to age
3) Impact of controlling for variables in homework research
4) Optimum amount of homework by grade level
5) Homework compared to other instructional strategies

## Impact of time spent doing homework

-The amount of time spent doing homework has been positively correlated with achievement (Cooper 2007) (but not always):

- Study type 1: Compared groups of students who received homework to those that did not.
$>$ Caveat "introducing nearly any innovation is better than it's absence (Hattie 2009)."
- Study type 2: Examined relationship between time spent on homework and achievement $---\rightarrow$ mixed results.
$>$ Some positive correlation, some negative correlation
- Flunger et al 2015:
- Time spent on homework can be associated with positive (as in the high-effort learner) or negative (as in the struggling learner) outcomes.



## Homework effectiveness related to age

-Homework appears to be more effective for older students than younger students (Cooper 1989 \& 2006)

- 0= no correlation, 1 = perfect correlation
- Grades 3-5 correlation nearly zero
- Grades 6-9 correlation was . 07
- Grades 10-12 correlation was . 25
* Achievement usually measured by one of 3 types of data: scores on teacher designed tests, grades given by teachers, or scores on standardized tests
* Some conflict among studies in relationship between homework and grades and homework and standardized tests


# Impact of controlling for variables in homework research 

- As more variables were controlled for, the correlation between homework and achievement diminishes
oTrautwein \& Koller 2003 - Controlled for motivation, ability, quality of instruction, course work quantity, and some background variables $---\rightarrow$ no meaningful effect of homework on achievement remained.
-Maltese and colleagues 2012 - Controlled for student background, motivation, and prior achievement in high school math and science students - no substansive difference in grades between students who did homework and who did not


## Optimum amount of homework by grade level

## - At each grade level, there appears to be an optimum amount of homework.

- "10 minute rule" - 10 minutes per grade level had been an acceptable standard by the NEA and National PTA


## Homework recommendations

The National Education Association and National PTA endorse a
10 -minute recommendation for homework, multiplied by a student's grade level. A fifth-grader, for example, should have a maximum of 50 minutes of homework on school nights.


Graphic:
https://www.news-
press.com/story/news/education/2014/09/27/h omework-helpful-harmful/16360923/

This is the chart for the amount of homework each grade level should have each night according to the National Education Association and National Parent Teacher Association

- For high school students grades 10-12, achievement appears to improve until students are doing about 2 hours of homework a night, after that point achievement begins to decline (Cooper 2006)


## Homework compared to other instructional strategies <br> Vatterott 2018

- Homework is less effective than many other instructional strategies. (Hattie 2009).
- Instead of asking what works, we should be asking what works best (Hattie 2009).
- Hattie's compiled more than 800 meta-analyses relating to student achievement and what works. Hattie's synthesis (Hattie 2009, p.235):
- Reaffirms Coopers findings on difference in homework effectiveness across grade levels
- Led to this conclusion: "Prescribing homework does not help students develop time management skills - there is no evidence that this occurs"
- In 138 rank ordered influences on learning based on statistical effect size, homework was ranked $88^{\text {th }}$, yet feedback ranked $10^{\text {th }}$
- Homework can be used for feedback if a teacher chooses to use it that way provided the task and conditions are right.


## Limitations of the Research vateoctr2018

- Over reliance on Cooper's work
- General Quality of Homework Research
- Aren't All Students Different ?


## The Homework Debate

## Recommended focus should be on :

## How can homework be improved to be doable and effective ?

VS.

## Does homework improve learning ?

When teachers design homework to meet specific purposes and goals, more students complete their homework and benefit from the results. Epstein and Van Voorhis 2001

When homework is properly utilized by teachers, it produces an effect in learning three times as large as the effect of socioeconomic status. Redding 2000

## The New Homework Paradigm

## Comprehensive set of practices include:

-Designing quality homework tasks
-Differentiating homework tasks

- Moving from grading to checking
-Deemphasizing the grading of homework
-Using completion strategies


Cathy Vatterott 2018
-Establishing homework support programs
$>$ Before addressing the first of these (quality homework), must consider the purpose and how it relates to what is learned in the classroom

## Purpose of homework

"In standards-based learning, our goal is for all students to reach the standards. Figure 4.1 outlines the shift in purpose. The five purposes on the right hand column are consistent with that goal." Vatterott 2018

| FIGURE 4.1 <br> The Shift in the Purpose of Homework |  |  |
| :---: | :---: | :---: |
| Marzano, Pickering, and Pollock (2001) | Vatterott (2009) | Vatterott (2018) |
| - Preparation <br> - Practice <br> - Extension | - Preleaming <br> - Checking for understanding <br> - Practice <br> - Processing | - Prelearning <br> - Diagnosis <br> - Checking for understanding <br> - Practice at the application level <br> - Processing (reflection, application, analysis, synthesis) |

## Designing Quality Homework Tasks vaterotr2018

## Four aspects which affects student's motivation to approach the task and their perseverance to complete it:

1) Academic purpose - tasks should have a clear academic purpose
2) Efficiency - Tasks should help students reach the standard without wasting time or energy
3) Competence - Tasks should have a positive effect on a student's sense of competence
4) Ownership - Tasks should be personally relevant and customized to promote ownership

Flipped Homework - attends to all four aspects of designing quality homework

## Differentiating Homework Tasks

## -Vatterott 2018

-Differentiating by Difficulty or Amount of Work
oDifferentiating by Amount of Structure or Scaffolding
-Differentiating by Learning Preference or Interest
$>$ Personalized homework - involve student in setting goals, planning a specific homework task, and determining how they will demonstrate learning

- Flunger et al 2015
oEducational research needs to study interventions strategies that target the risk group of struggling learners
oPossible approach could be implementation of autonomy-supportive instructional strategies, such as providing rationale for a task i.e. identifying value and importance of homework (Reeves et al 2004)


## Moving from Grading to Checking vatemernens

- Homework's role should be as formative assessment - providing feedback without grades.
- Giving feedback to students about their learning when there is still time to improve.
- Homework gives the teacher feedback about student learning, which allows the teacher to adjust instruction and to give targeted feedback to the learner - and the cycle continues.
- Ways of providing feedback
>Busy teachers need quick and efficient methods of checking for understanding
- Checking, not correcting i.e. quick visual check to identify students who understood vs. who didn't


## - Helping students self assess

>Many students don't know how to self assess and need to be taught how

- Examples: use of symbols of stickers to indicate level of understanding, short fill in the blanks for feedback of what they understood and what they were confused with, use of ruberics, etc.


## Deemphasizing Grading Homework ${ }_{\text {verteor20ns }}$

-The goal is to have grades reflect learning, not behavior or personal responsibility (Brookhart 2017)
-Because students typically don't see how homework connects to summative assessments, it needs to made explicit.

- Decriminalizing late work: if homework must count in the grade it is better to provide a more generous time limit with fewer points lost than to punish the student
oThe goal is learning, not control or compliance


## Homework Completion Strategies and Establishing Homework Support Programs

continued

- Diagnosing completion problems
- Use of parent or student feedback checklists to assist with diagnosis Vatterott 2018:


- Prioritizing concepts, tasks, and subjects if student determined to be a slow worker after diagnosis and adjustment of homework
- Various options to consider include classroom strategies, options that find time during the school day, curricular and scheduling options, before and after school support programs


## Classroom Application

## Practical applications for increasing homework effectiveness can be divided into 3 categories:

-1) Strategies for teachers
-2) Parent involvement and training
-3) Self-regulation strategies

## Strategies for Teachers car 2013

## Procedures to improve homework effectiveness

- Assign homework at the beginning of class
- Homework should be explained and directions should be posted on the board in writing (McNary et al., 2005)
- Students should be given the opportunity to start homework in class so that teachers can check for understanding and give feedback before they leave (Cooper \& Nye, 1994; McNary et al., 2005; Patton, 1994)
- Homework should be explicitly related to the classwork
- Homework should be returned promptly with feedback (Redding, 2006)
- Teachers should coordinate with each other for timing of assignments and tests so that students are not being overwhelmed with many assignments and tests at one time (McNary et al 2005, Patton 1994).


## Parental Involvement and Training

-Parental involvement in homework has been found to lead to higher homework completion and, which in turn produces higher achievement (Keith 1992 cited in Carr 2013).
-Different types of parental involvement in homework were associated with different outcomes with parent autonomy support to be the most beneficial one. Gonida \& Cortina 2014

- i.e. provision of facilitating hints, encouraging careful review, promoting self-regulation
-Communication should go both ways. Parent feedback checklist can be used.
- Vatterott 2018: Give parents specific guidelines on how to help with homework and how much to help:

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FIGURE 2.1
Suggested Guidelines for Parental Involvement in Homework
Parents are encouraged to.
    Ask their child about what the child is studying in school.
    Assist their child in organizing homework materials.
    Help their child formulate a plan for completing homework
    Provide an appropriate space for their child to do homework.
Parents may, if they wish
    Help their child interpret assignment directions.
    Proofread their child's work, pointing out er
    Read aloud required reading to their child.
    Give practice quizzes to their child to help prepare for tests.
    Help their child brainstorm ideas for papers or projects.
    Praise their child for completing homework.
Parents should not..
    Attempt to teach their child concepts or skills the child is unfamiliar with.
    Complete assignments for their child
    Allow their child to sacrifice sleep to complete homework.
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## Self-regulation Education to Promote Homework Effectiveness

## Background :

-Executive function and self regulation skills are what allow us to set goals, plan, and get things done.
-Children aren't born with executive function and self regulation skills - they are born with the potential to develop them.
-Dramatic growth occurs between the ages of 3-5 and development continues throughout adolescence and early adulthood.
-Efforts to support the development of these skills deserve much greater attention in the design of early care and education programs.


Tests measuring different forms of executive function skills indicate that they begin to develop shortly after birth, with ages 3 to 5 a window of opportunity for dramatic growth in these skills. Development continues throughout adolescence and early adulthood.
https://developingchild.harvard.edu/resources/inbrief-executive-function/

## Self-regulation Education to Promote Homework Effectiveness

Carr 2013

- In order to complete homework successfully, students must learn to self regulate .
-Teachers can apply research based principles in the area of self regulation to improve homework effectiveness. Teachers can assist students to learn self regulating skills in a variety of ways including:
o Reinforce the use of planner and other time management tools in the classroom
o Tools should be modeled in class as part of class routines.
- Remind students of dues dates on a regular basis both orally and by writing.
oStudents must be taught how to evaluate and self reflect.


## EXECUTIVE FUNCTION



## The Big Picture for Homework Considerations

Shift in Focus: From Quantity and Achievement to Quality and Engagement

The questions we should be asking:

1) What is the quality of the homework that is being assigned ?
2) Is the homework valuable and meaningful to students ?
3) Does the homework serve to engage students more deeply with the material ?
http://www.challengesuccess.org

## Summary of Research Findings \& Implications

- The inability of the research to prove homework's usefulness consistently does not mean that homework cannot be useful or worthwhile, but rather that it has not been useful in many cases. Vatterott 2018
-There is evidence that when used appropriately, homework benefits student achievement. Vatterott 2018
-If homework is given it should be done carefully with reflection about its purpose, the nature of the task should be planned carefully, and homework should be assessed carefully to check for understanding and adjust instruction accordingly. Vatterott 2018
-Focus should be on quality of homework and the extent to which the homework engages students in learning. http://www.challengesuccess.org
- The needs of individual learners must be the driving force behind all instructional decisions. Carr 2013
-Common goal across all stakeholders is to promote a positive learning experience and success in our students.

Surveys

## Survey Groups

-Parent Survey
-Student Surveys- (Elem, Middle, High)
-Teacher Survey

## Parent Highlights

17. On average how much time does your child spend on homework EACH NIGHT?

| More Details |  |
| :--- | :--- |
| under 1 hour | 649 |
| 1 to 2 hours | 204 |
| 2 to 3 hours | 115 |
| 4 or more hours | 42 |


18. How much are you involved in helping with your child's homework?

| More Details |  |
| :--- | :--- |
| Not at all | 154 |
| $10-24 \%$ | 374 |
| $25-49 \%$ | 162 |
| $50-74 \%$ | 124 |
| $75-100 \%$ | 197 |



## Student Highlights-Elementary



## Student Highlights- Middle School

11. How many NIGHTS do you have homework EACH WEEK?

More Details
under 1

- 1 to 2
- to 3
- 3 to 4

4 or more
490
12. How much TIME do you spend on homework EACH NIGHT?

More Details
under 1 hour
1 to 2 hours
2 to 3 hours

- 3 to 4 hours

4 or more hours

17. Do you struggle with..


## Student Highlights- High School

12. How many NIGHTS do you have homework each WEEK?

13. How much TIME do you spend on homework each NIGHT?
under 1 hour 25

- 1 to 2 hours 58

2 to 3 hours

- 3 to 4 hours
- 4 or more hours


## 36

18. Do you struggle with.
the amount of homework
100
the difficulty of homework
time management
All of the above
 106
. None of the above 22

Other


## Teacher Highlights - all grades combined

8. How often do you assign HW

More Details

| Daily | 65 |
| :--- | :--- |
| Weekly | 84 |
| Monthly | 11 |

9. If daily

More Details

Less than 30 minutes
58

- 30 to 60 minutes

7
longer than one hour

## Teacher Highlights - all grades combined

13. Why do you give HW (select all that apply)

14. Do you feel you are able to differentiate HW

- Yes


## Teacher Highlights - all grades combined

19. What kind of feedback do you give (click all that apply)
Brief comments 86
Check for completeness
Check for understanding118
Review as a class 90Other

20. Do you believe your students could benefit from additional training on time management, homework completion and/or study skills?

- Yes 168
No


## Overall Survey Results

Student Form - Elementary - 89\% spend 1 hour or less on HW. , Math dominated in what takes the most time.

Student Form - Middle School - 71\% spend 2 hours or less on HW, 26\% identified spending more than 2 hours. Math dominated in what takes the most time.

Student Form - High School - Only about 1/3 answered the survey. 59\% spend 3 hours or less. Social studies takes the most time followed by science, LS and Math.

Parent Form - Of those who identified 1 grade, $73 \%$ were elementary, $18 \% \mathrm{MS}$, and $12 \%$ HS. $77 \%$ say their children to 2 hours or less. Under $4 \%$ say 4 or more hours.

Parent Concerns- Participation of family time, sports. Communication of Homework, Homework not being checked at all or checked for understanding

Recommendations

Time Management:
In order to build student literacy and responsibility at the elementary level, students are expected to read, or be read to, daily. Students may be expected to complete additional assignments to enhance and support learning. Projects may extend this time frame. Expected time frames (Monday - Thursday) will not exceed:

| Grade | Reading | Additional Assignments |
| :--- | :--- | :--- |
| Kindergarten | 10 min. | 10 minutes daily |
| $1^{\text {st }}$ Grade | 15 min. | 15 minutes daily |
| $2^{\text {nd }}$ Grade | 20 min. | 20 minutes daily |
| $3^{\text {rd }}$ Grade | 20 min. | 30 minutes daily |
| $4^{\text {th }}$ Grade | 25 min. | 40 minutes daily |
| $5^{\text {th }}$ Grade | 25 min. | 50 minutes daily |

Guidelines for Teachers:
$\checkmark$ Assignments may be differentiated taking the following into consideration; learning style, choice, academic levels, product, depth of knowledge as well as situations/home environment.
$\checkmark$ Work assigned over a break will be given with advance notice if the due date is after the break.
$\checkmark$ Homework on weekends should not be assigned on a regular occurrence.
$\checkmark$ Work collaboratively by grade level to keep homework consistent throughout the grade.
$\checkmark$ Share and post information regarding homework via Canvas and/or student assignment book
$\checkmark$ Include checkpoints for long-term projects to ensure student understanding and progress.
$\checkmark$ Communicate with the family if a student is struggling with accurately completing homework or if the homework is incomplete.
$\checkmark$ Share with the family the level of parental assistance expected for the assignments
Guidelines for Students:
$\checkmark$ Bring all materials home and return to school the following day.
$\checkmark$ Use assignment book and/or Canvas to keep track of work. (Grades 3-5)
$\checkmark$ Limit distractions while completing homework so that you can focus solely on the assignments.
$\checkmark$ Try to work independently to complete homework to the best of your ability.
$\checkmark$ Let your teacher know if you had difficulty working on your assignments and why.

## Guidelines for Parents:

$\checkmark$ Encourage your child to work independently but say that you are available for help.
$\checkmark$ Be encouraging and supportive
$\checkmark$ Provide a quiet space at home to complete assignments and reading.
$\checkmark$ Communicate with the teacher if your child is having difficulty or requires extended time
$\checkmark$ Contact the teacher if extensions are needed for extenuating circumstances.
$\checkmark$ Access Canvas and assignment book for assignment postings.

Elementary Guidelines

Homework is an opportunity to support and enhance learning. Homework introduces, reinforces, or extends knowledge and skills learned in the classroom.

Homework promotes learning related behaviors that lead to independence such as time management, responsibility, organization, self-advocacy, and inquiry.

## Middle Leve

Time Management:
$\checkmark$ On average, homework per night should not exceed 60 minutes for sixth graders and 90 minutes for seventh and eighth graders, unless the student is participating in accelerated courses. Additional reading time/study time is recommended.
$\checkmark$ Fall, Winter, and Spring Breaks are reserved for time with family. Students may elect to use this time to review materials, make up work, complete projects, and enjoy recreational reading. New assignments will not be issued over these breaks by the teacher.
$\checkmark$ Homework assigned over a weekend shall be considered the equivalent of a one-night daily assignment.

## Guidelines for Teachers:

$\checkmark$ Review, discuss, and return collected homework prior to an assessment or teaching new material.
Communicate and coordinate assignments with colleagues during team time so that students do not receive an overload of homework.
$\checkmark$ Explain homework to the students beforehand and include the purpose, recommended study skills, and an estimated time of completion.
$\checkmark$ Identify students' access to online materials, answer keys, additional copies (Canvas, Office 365, and textbooks), and provide methods and instructions for use.
$\checkmark$ Differentiate homework for students as needed.
$\checkmark$ Grade homework on completion or accuracy as appropriate.
$\checkmark$ Communicate homework expectations, policies, procedures, and the impact on the overall grade
$\checkmark$ Include a suggested framework or checklist for timely completion for long-term assignments.

## Guidelines for Students:

Accurately record homework assignments made in class by the teacher.
$\checkmark$ Check Canvas to see individual teachers' assignments and links.
$\checkmark$ Seek clarification or assistance from the teacher prior to the assignment due date when a homework assignment is unclear, or if the assignment requires additional time to complete.
When challenged by homework, send the teacher an email or talk to the teacher at the beginning of class.
Make every effort to complete homework as assigned independently.
$\checkmark$ Utilize the resources provided - class notes and/or Canvas.
$\checkmark$ Use specified (period 8) time provided for completing classwork and/or starting homework.
Limit distractions while completing homework.

## Guidelines for Parents:

$\checkmark$ Provide a quiet space at home for homework completion
Help your student to develop time management skills and study skills as a way to increase productivity and manage assignments.
$\checkmark$ Encourage your child to communicate with his/her teacher if having difficulty or requiring excessive time to complete homework. Contact the teacher directly if further assistance is needed.
$\checkmark$ Access homework on Canvas as this will be the central communication tool.

Homework is an opportunity to support and enhance learning. Homework introduces, reinforces, or extends knowledge and skills earned in the classroom.

Homework promotes learning related behaviors that lead to independence such as time management, responsibility, organization, selfadvocacy, and inquiry.

## Time Management

$\checkmark$ On average, homework per night should not exceed 2 hours unless the student is participating in advanced placement courses and/or taking additional classes beyond the average course load.
$\checkmark$ No homework should be assigned during Fall, Winter, and Spring breaks. Students may choose to use this time to review materials, make up work, complete projects, and enjoy recreational reading
Homework assigned over a weekend shall be considered the equivalent of a one-night daily assignment.

## Guidelines for Teachers:

$\checkmark$ Provide feedback to the students in a timely manner
$\checkmark$ Collaboration on amount of homework within grade level and rigor level of subject where possible
$\checkmark$ Give clear instructions, explain purpose, and estimate intended completion time when assigned.
$\checkmark$ Identify the access that students have to materials, answer keys, additional copies that are online (Canvas, Office 365 , and textbooks).
$\checkmark$ When possible, differentiate homework for students
$\checkmark$ Communicate homework expectations, policies, procedures, and the impact on the overall grade
$\checkmark$ Include a suggested framework or checklist for timely completion for long-term assignments.
$\checkmark$ When possible, provide advanced notice for all assignments.

## Guidelines for Students:

$\checkmark$ Accurately record homework assignments given in class or posted online by the teacher
$\checkmark$ Seek clarification or assistance from the teacher prior to the assignment due date when a homework assignment is unclear, or if the assignment requires additional time to complete.
$\checkmark$ Make every effort to complete homework as assigned independently
$\checkmark$ Refer to class notes, discussions, and other available materials to help complete homework.
$\checkmark$ Utilize study hall time to complete homework assignments.
$\checkmark$ Create optimal conditions for completing homework. (turn off phones, limit distractions, have a quiet and organized workspace, etc.)

## Guidelines for Parents/Guardians:

$\checkmark$ Provide a quiet space at home for homework completion
$\checkmark$ Help your student to develop time management skills as a way to increase productivity and manage assignments.
$\checkmark$ Encourage student to communicate directly with the teacher if they are having difficulty or requiring excessive time to complete homework.
$\checkmark$ Familiarize yourself with teachers' homework policies and periodically check students' grades.

## High School Guidelines

## Strengths of PASD Related to Homework Practices

-District proactive with assessing data to drive positive change
-District promotes employee growth and effectiveness
-Attention to homework differentiation
-Formative assessment training

- Summative assessment training
-During \& after school homework support available
- Many resources within the district


## Implementation and Further Development

-Communicate revised homework guidelines

- In-servicing of Canvas
-Trainings more specific to effective homework practices
-Communication of homework supports available


## References

Anderson, M. Learning to choose, choosing to learn:The key to student motivation and achievement. Alexandria, VA: ASCD, 2016.
Azzam, A.M. "Motivated to Learn: A conversation with Daniel Pink." Educational Leadership 72(1), 12-17, 2014.

Breitenstein, Dave."Homework: How much is too much?" News-Press. Part of the USA today Network. 28 September 2014 https://www.news-press.com/story/news/education/2014/09/27/homework-helpful-harmful/16360923/

Brookhart S.M., How to use grading to improve learning. Alexandria, VA: ASCD, 2017.
Carr, Nicole Schrat."Increasing the Effectiveness of Homework for All Learners in the Inclusive Classroom" School Community Journal, Vol 23, No. 1, 2013
"Changing the Conversation About Homework from Quantity and Achievement to Quality and Engagement." Challenge for Success White Paper, 2012http://www.challengesuccess.org/wp-content/uploads/2015/07/ChallengeSuccess-Homework-WhitePaper.pdf

## Cooper, Harris. "Synthesis of Research on Homework" Educational Leadership, 47(3), 85-91.1989

Cooper, Harris. "The battle over homework:Common ground for administrators, teachers, and parents (3 ${ }^{\text {rd }}$ ed.) Thousand Oaks, CA: Corwin, 2007
Cooper, H., \& Nye, B. Homework for students with learning disabilities: The implications of research for policy and practice. The Journal of Learning Disabilities, 27(8), 470-479, 1994.
Cooper, H., Robinson, J.C., \& Patall, E.A. "Does homework improve academic achievement?" A synthesis of research" Review of Educational Research 76(1), 1-62, 2006
Cushman, K. "Fires in the mind: What kids can tell us about motivation and mastery." SanFrancisco: Jossey-Bass, 2010.
Cushman, K. "Show us what homework is for." Educational Leadership, 68(1), 74-78, 2010.
Darling-Hammond L. \& Ifill-Lynch, O. "If they'd only do their work!" Educational Leadership 63(5), 8-13, 2006.
Depka, E. Bringing homework into focus: Tools and tips to enhance practices, design, and feedback. Bloomington, IN: Solution Tree, 2015.

Epstein, J.L., \& Van Voorhis, F.L. "More than minutes: Teachers role in designing homework." Educational Psychologist 36(3), 181-193, 2001.
"Executive Function Development: When do skills typically emerge ?"Retrieved from www.beyondbooksmart.com/hubfs/Resources\ page\ images/EF\ skill\ development\ PDF.pdf Accessed March 2019.
"Executive Function Skills for Life and Learning (In Brief)." Center on the Developing Child; Harvard University (2012) Retrieved from www.developingchild.harvard.edu Accessed March 2019.

## References continued

Flunger B, Trautwein U, Nagengast B, Ludtke O, Niggli A, Schnyder I. "The Janus-faced nature of time spent on homework: Using latent profile analyses to predict academic achievement over a school year."Learning and Instruction 39, 97-106, 2015
 2014

Hattie, J. Visible Learning. London: Routledge, 2009
"Homework and Families: Issues, Trends and Challenges." Vatterott, Cathy Boost Conference 2010. < https://www.youtube.com/watch?v=rlmy0PFv02g
Keith, T.Z., Effects of parental involvement on eighth grade achievement, LISREL analysis of NELS-99 data. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, 1992

Kohn, A. Punished by rewards. The trouble with gold stars, incentive plans, A's, praise, and other bribes (2 ${ }^{\text {nd }}$ ed.) New York:Houghton Mifflin, 1999.

McNary, S., Glasgow, N., \&Hicks, C. What successful teachers do in inclusive classrooms: 60 research based teaching strategies that help special learners succeed. Thousand Oaks, CA: Corwin Press, 2005.
Patton, J.R. Practical recommendations for using homework with students with learning disabilities. Journal of Learning and Disabilities, 27(9), 570, 1994
Pink, D.H. Drive: The surprising truth about what motivates us. New York: Riverhead Books, 2009
Redding, S. Parents and Learning. Geneva: UNESCO Publications. Retrieved from http://www.ibe.unesco.org/publications/EducationalPracticesSeriesPdf/prac02e.pdf
Reeves J, Jang H, Carrell D, Jeon S, Barch J. "Enhancing students engagement by increasing teachers' autonomy support." Motivation and Emotion 28(2, 147-169, 2004
Trautwein, U., \& Koller, O."The relationship between homework and achievement-still much a mystery." Educational Psychology Review 15(2), 115-145, 2003
Vatterott, Cathy. "Giving Students Meaningful Work. " Educational Leadership 68(1), 10-15, 2010
Vatterott, Cathy. Rethinking Homework: Best Practices That Support Diverse Needs. ASCD, 2018.

Appendix

Flipped Homework - attends to all four aspects of designing quality homework vaterott 2018

- Flipped homework
- The practice of delivering direct instruction and basic content to students through an instructional video as homework and then spending class time on application, analysis, and practice
o Has the potential to make homework more efficient and purposeful but also allow for student ownership and competence.


# What Differentiated Homework Looks Like 

Vatterott 2018

## FIGURE 4.4

What Differentiated Homework Looks Like

| Purpose of Homework | Example of Skill or Content | Differentiation for Difficulty/ Amount of Work | Differentiation for Scaffolding/ Structure | Differentiation for Learning Preference/Interest |
| :---: | :---: | :---: | :---: | :---: |
| Practice of rote memory | Multiplication tables | Some students may work on only one set at a time until they achieve some mastery. Other students may work on several sets at one time. | Some students may have a completed grid that they trace. Some students may write from memory. | Students may choose to write, recite, create their own table, or set tables to music to help them learn. |
| Practice of a skill | Division of whole numbers | Some students' problems will use two-digit numbers, some three-digit rumbers, some four-digit numbers. Some students will be assigned fewer problems. | Some students will receive problems that are partially filled inthey provide the missing numbers. Some students will have explanations of steps written in the margin of their assignment. | Students may write and solve their own word problems, or they may complete practice problems from one of several math websites. |
| Prelearning | Main ideas of the chapter | Some students will have abbreviated reading assignments focusing only on certain sections of chapter. Some will have focused questions to guide them to main ideas. | Some students may be given an advance organizer. Some may have a word bank to choose main ideas from. | Students may draw a graphic summary of the main ideas and list the three most interesting things about the chapter. |
| Checking for understanding | Causes and effects of the Boston Tea Party | Some students will read the textbook. Other students may read a simpler version written as a play. | Some students will list the causes and effects of the Boston Tea Party. Other students will receive a list with some causes or some effects provided and have to fill in the blanks. | Students may defend or criticize the actions of the participants of the Boston Tea Party with an editorial, a poster, or a concept map. |

## Moving from Grading to Checking vaterot 2018

- Homework's role should be as formative assessment - providing feedback without grades.
- Giving feedback to students about their learning when there is still time to improve.
- Homework gives the teacher feedback about student learning, which allows the teacher to adjust instruction and to give targeted feedback to the learner - and the cycle continues.
- Ways of providing feedback
$>$ Busy teachers need quick and efficient methods of checking for understanding
- Checking, not correcting i.e. quick visual check to identify students who understood vs. who didn't
- Helping students self assess
$>$ Many students don't know how to self assess and need to be taught how
- Examples: use of symbols of stickers to indicate level of understanding, short fill in the blanks for feedback of what they understood and what they were confused with, use of ruberics, etc.


## Homework Completion Strategies and Establishing Homework Support Programs vaterotrt2018

- Diagnosing completion problems
- Assuming the homework is meaningful and not busywork, the first step to improving homework completion is to diagnose why the homework is not getting done. There are usually five types of reasons
- 1) Academic - task too hard or too lengthy for student's working speed, or task to easy and has been mastered
- 2) Organizational - having trouble getting the homework home, getting it done, or getting it back
- 3) Motivational - burnout, overload, too much failure frustration
- 4) Situational - unable to work at home, too many other activities, lacks materials at home for the assignment
- 5) Personal - experiencing personal issue such as depression, anxiety, or family problems


## Homework Completion Strategies and Establishing Homework Support Programs continued

- Vatterott 2018:
- Helping, not punishing
- Homework support programs are more effective when the attitudes and intentions of teachers and administrators are about helping rather than punishing.
- Various options to consider include classroom strategies, options that find time during the school day, curricular and scheduling options, before and after school support programs
- Changes that can be helpful to start include:
- Limit percentage that homework can count in the grade
- Revise late policies
- Limit number of subjects in which homework is assigned each night
- Set weekly or nightly time limits
- Prohibit weekend or holiday homework
- Coordinate homework with calendar limiting number of tests or projects at a given time
- Limit number of AP classes that students may take in a semester


## Quality of Homework



## Overall Survey Results

- Student Form - Elementary - 89\% spend 1 hour or less on HW. , Math dominated in what takes the most time.
- Student Form - Middle School - 71\% spend 2 hours or less on HW, $26 \%$ identified spending more than 2 hours. Math dominated in what takes the most time.
- Student Form - High School - Only about 1/3 answered the survey. 59\% spend 3 hours or less. Social studies takes the most time followed by science, LS and Math.
- Parent Form - Of those who identified 1 grade, $73 \%$ were elementary, $18 \% \mathrm{MS}$, and $12 \% \mathrm{HS} .77 \%$ say their children to 2 hours or less. Under $4 \%$ say 4 or more hours.
- Parent Concerns- Participation of family time, sports. Communication of Homework, Homework not being checked or checked for Understanding

