

Best Practices in High School Distance Education Lessons Learned from COVID-19



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March 3, 2021

Executive Summary

In March 2020, the COVID-19 pandemic threw students and teachers at Lawrence High School (LHS) into a distance learning format for which neither group was prepared or trained. Lawrence High School continued delivering all instruction exclusively through a distance learning format through the end of January 2021. While every teacher has been doing their best under the circumstances, they have been doing so largely without specific guidance on best practices in the distance education format and mostly figuring things out as they go along.

This action research project was designed to identify empirically-supported best practices in secondary grade education from the existing literature base as well as to identify emerging best practices from teachers at LHS who have been identified as successful distance learning teachers by their building and content area administrators. While the literature review revealed best practices, their specific applicability to secondary grades should be interpreted with caution. Teachers were interviewed both individually and as a focus group and it was determined that all interviewees were implementing some of the best practices identified from the literature review, but no interviewee was implementing them all. There was significant overlap in the best practices and themes gleaned from the literature review and the best practices identified by the interviewees. Best practices will be shared with LHS staff at large and likely incorporated into training components for a potential virtual instruction option at Lawrence High School. Specific recommendations for further research specifically geared toward secondary grade students and the distance learning experience appear at the end of this document.

Teaching in a Pandemic - A Perfect Storm

- **Little/no lead time** to prepare
- **Uncertainty** re: technological infrastructure
- **Equity of access** without physical school building/resources
- **No prior experience** upon which to draw - teachers or administrators

Problem Statement

- Since March 2020, LHS teachers have been teaching in a new mode for which they have **never been trained**
- Staff dedication to meeting student needs is not in question, but teachers report **uneven degrees of** student engagement/ performance (“**success**”) in remote environment
- It is unknown whether or not current remote instruction teaching practices at LHS align with research-based best practices in distance learning

Research Questions

- What practices, *if any*, has peer-reviewed research delineated as best for distance learning in secondary grades?
- What practices have LHS teachers found effective in maintaining student engagement and performance?
- What common themes exist across identified best practices that could be extrapolated for **future use** at LHS?

Germane to the Situation

- Discussion at LTPS for last several years about a distance learning option
- 1:1 laptop program in place for high school students since 2010 (eventually extended down to grade 6)

Literature Review

- Significant driver of this project
- Distance education is not a new phenomenon
- Qualitative data equally valid as quantitative
- Search focused on peer-reviewed studies specifically at secondary level
 - Most literature focused on higher ed - interpret & apply to 9-12 with **caution**
 - Literature does not factor in trauma associated with pandemic - again, interpret & apply with **caution**

Best Practices Sorted by Theme – Literature Review

Practices	Frequency
Effective Communication	
Regular interaction between/among students and teachers	19
Clear communication from teachers	14
Collaboration (students and professionals)	8
Regular high-quality feedback from teachers	7
Effective Instructional Design	
Emphasize active learning	9
Flexibility in meeting course objectives	6
Strong organization	5
Ongoing course evaluation	3
Student Centeredness	
Student voice/agency	6
Student intrinsic motivation	5
Effective Technology Use	
Reliable technology supported by knowledgeable teachers and dedicated technology support staff	11

Key Takeaways - Effective Communication

- Prioritize **synchronous** time for **interactive** learning opportunities
- Build **community** & combat potentially **isolating** nature of distance education
- Clear, regular communication; consistent deadlines/expectations (including **exemplars**)
- Manage expectations re: turnaround time on communication (no 3am responses!)
- Teacher feedback
- Collaboration
 - Students - collaboration over competition
 - Staff - share ideas; **adapt** courses to distance/online format

Key Takeaways - Effective Instructional Design

- **Active** learning experiences
- Discussion (can take many forms), metacognition, projects (process & product)
- **Multiple** pathways to meeting course objectives
- Strong **organizational** skills (teacher and student)
- **Intentionality** in sequence/scaffolding
- Ongoing course **evaluation**

Key Takeaways - Student Centeredness

- Student voice/agency
- Prioritize peer presentation, assessment
- Intrinsic motivation of students

Key Takeaways - Effective Technology Use

- Knowledgeable **of** and **about** different tech tools
- select best tool for each job
- **Intentional** and **deliberate** in tool choice to serve student needs & course objectives
- Ongoing access to tech **support** to reduce frustration, increase participation

Qualitative Data Collection: Who Responded?

Focus Group
(Convenience Sample)
June 2020

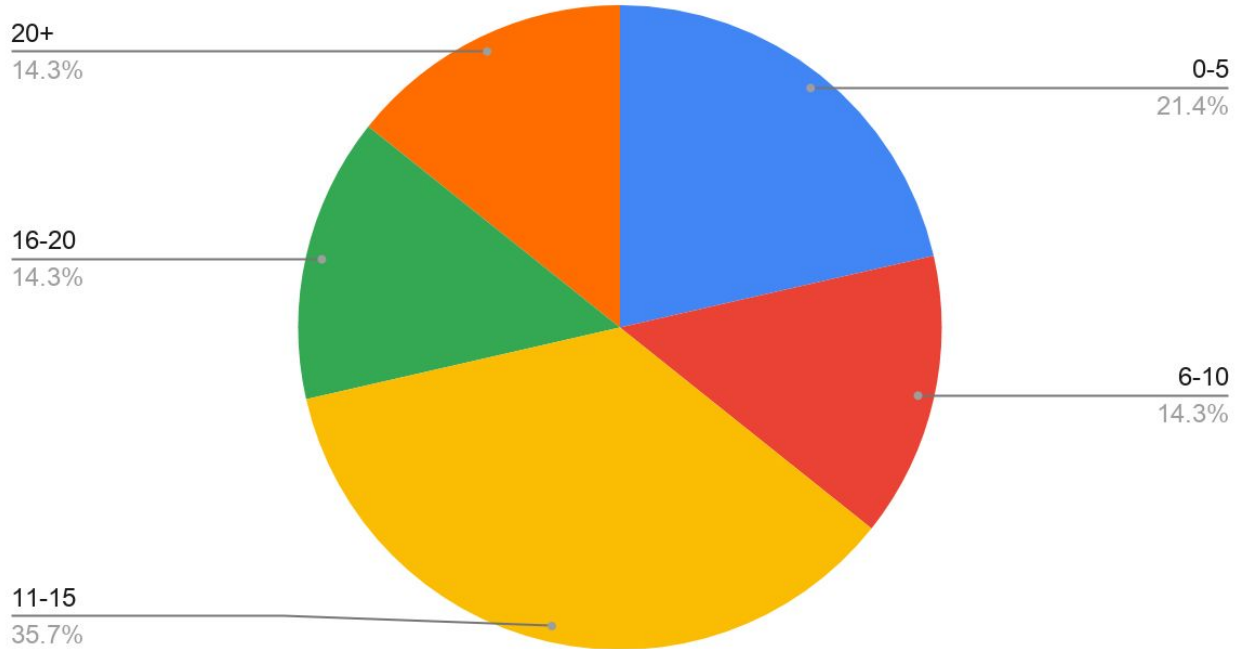
- Theater
- Family & Consumer Sciences
- Business

Individual Interviews
(Purposive Sample)
December 2020

- Health/Physical Education
- World Language
- Special Education
- English
- Music
- Social Studies
- Science

Qualitative Data Collection: Who Responded?

Participants' Years of Experience



Practices	Appearances		
	Literature Review	Individual Interviews	Focus Group
Effective Communication			
Regular interaction between/among students and teachers	19	11	Yes
Clear communication from teachers	14	2	No
Collaboration (students and professionals)	8	3	No
Regular high-quality feedback from teachers	7	8	Yes
Effective Instructional Design			
Emphasize active learning	9	2	No
Flexibility in meeting course objectives	6	2	No
Strong organization	5	5	No
Ongoing course evaluation	3	7	No
Student Centeredness			
Student voice/agency	6	3	Yes
Student intrinsic motivation	5	1	No
Effective Technology Use			
Reliable technology supported by knowledgeable teachers and dedicated technology support staff	11	12	Yes

Interview Results

- No new themes!
- Local elaboration on / illustration of existing themes
- Alignment of local practices and research base

Interview Results

Researching, learning, and turnkeying explicit instruction in tech is time-consuming, but ultimately a worthwhile time investment.

Interview Results

Provide multiple communication pathways for engagement.

Interview Results

Adaptation is essential; some disciplines require more practical & logistical workarounds than others.

Interview Results

Some students thrived in the distance learning environment, including those who had previously struggled in the traditional model.

Interview Results

Synchronous instruction is an essential component of distance learning.

Research Questions Revisited

RQ1: Best practices identified, but mostly relevant to higher ed. Interpret & apply to secondary setting with caution.

RQ2: Significant overlap between best practice and local practice at LHS among interviewees. All implemented some, none implemented all.

RQ3: No unique themes emerged from local practice beyond those from the literature. Interview data provided elaboration/local practical examples for interpretation of theoretical best practices & recommendations.

Application to Leadership Practice

Professional Learning for All

- Sessions for future PD days (2021-2022)
- In the meantime...
 - **Feb - March 2021:** Share framework
 - **April - June 2021:** 'Bite-size' peer-led PD during faculty & department meetings; incorporate new knowledge of best practices into observation/walk-through feedback
 - **Sept 2021 & beyond:** Build on 'bite-size' peer-led model at monthly meetings; continue providing feedback

Targeted Training for Future 'Virtual Academy'

- Incorporate findings into professional training module for interested teachers
- Recruit successful teachers to turnkey
- Budget time/funds to **full curricular adaptation** to virtual model
 - Req'd core courses
 - Elective grad requirements
 - Grant to consult w/instructional designer
- Self- / peer eval tool a la Danielson
- Student survey to determine fit for distance learning?

Recommendations for Future Research

- Similar study, but from student perspective
- More peer-reviewed research specifically aimed at best practices in distance education for students and teachers in secondary grades
- Examination of why some HS students thrive in the distance education format, especially those who may have struggled in traditional format
- Longitudinal study documenting successes and challenges of secondary students and teachers in a distance learning setting (program growth/development, retention rates, “hows & whys”, problem-solving)