



***KEEPING KIDS SAFE FROM A DESIGN
PERSPECTIVE:***

**ETHICAL AND LEGAL GUIDELINES
FOR DESIGNING A VIDEO-BASED
APP FOR CHILDREN**

**BY JANET MANNHEIMER ZYDNEY, UNIVERSITY OF CINCINNATI AND
SIMON HOOPER, THE PENNSYLVANIA STATE UNIVERSITY
MARCH/APRIL 2015**



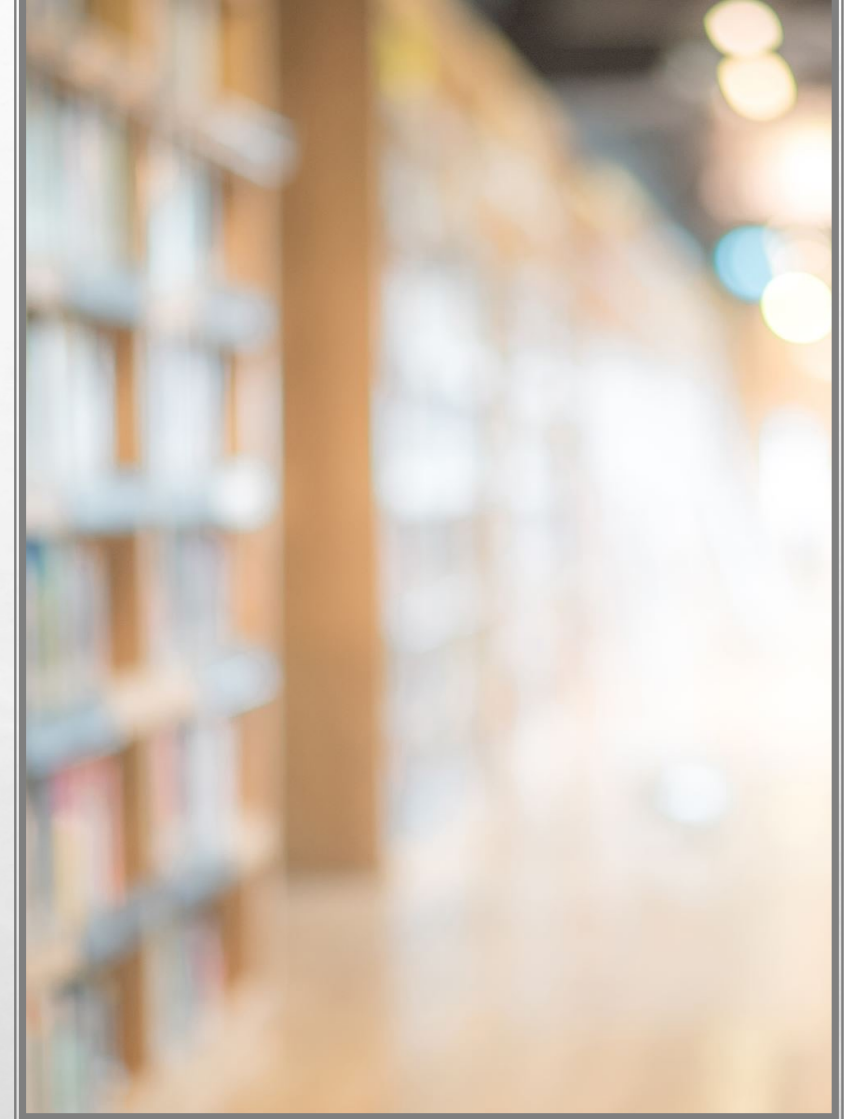
Presentation by Jacquelyn Smith

AGENDA



OVERVIEW

- **POPULATION TARGET**
 - **EDUCATORS SEEKING THE USER OF VIDEO-BASED SOFTWARE APPLICATIONS**
- **GOAL OF STUDY**
 - **PROVIDE ETHICAL AND LEGAL GUIDELINES FOR DESIGNING VIDEO-BASED APPS FOR MOBILE DEVICES AND THE WEB**
- **RESEARCH METHODS**
 - **REVIEW LITERATURE ON VIDEO-BASED DATA COLLECTION, COPPA, & AECT'S CODE OF PROFESSIONAL ETHICS**
 - **DEVELOP A SET OF QUESTIONS TO SERVE AS A FRAMEWORK FOR VIDEO-BASED APP DEVELOPERS**
 - **APPLY THIS FRAMEWORK TO DESIGN *STORY RETELL***
 - **PROVIDE EXAMPLES OF LEGAL CONSIDERATIONS FOR *STORY RETELL***
- **OUTCOMES**
 - **SET OF QUESTIONS TO SERVE AS A GUIDELINE FOR VIDEO-BASED APP DEVELOPMENT**



LITERATURE BACKGROUND – LEGAL

- **CHILDREN'S ONLINE PRIVACY PROTECTION ACT (COPPA)**
 - **PROHIBIT “UNFAIR OR DECEPTIVE ACTS OR PRACTICES IN CONNECTION WITH THE COLLECTION, USE, AND/OR DISCLOSURE OF PERSONAL INFORMATION FROM AND ABOUT CHILDREN ON THE INTERNET” (FEDERAL TRADE COMMISSION, 2013A, P. 4009)**
 - **REQUIRE THE OPERATOR OF A COMMERCIAL SITE OR SERVICE FOR CHILDREN TO “ESTABLISH AND MAINTAIN REASONABLE PROCEDURES TO PROTECT THE CONFIDENTIALITY, SECURITY, AND INTEGRITY OF PERSONAL INFORMATION COLLECTED FROM CHILDREN” (FEDERAL TRADE COMMISSION, 2013A, P. 4010)**
 - **AMENDED IN 2013 FROM ITEMS, SUCH AS FULL NAME, MAILING ADDRESS, AND E-MAIL ADDRESS, TO ALSO INCLUDE ITEMS REPRESENTATIVE OF MORE RECENT TRENDS IN TECHNOLOGY, SUCH AS AN AUDIO OR VIDEO POSTING OF A CHILD, GEOLOCATION INFO, AND OTHER PERSISTENT IDENTIFIERS THAT CAN BE USED TO IDENTIFY A CHILD OVER TIME (EX. DEVICE ID)**
 - **REQUIRES PARENTAL CONSENT**

LITERATURE BACKGROUND – LEGAL

- **ASSOCIATION OF EDUCATIONAL COMMUNICATIONS AND TECHNOLOGY (AECT) CODE OF PROFESSIONAL ETHICS**
 - **“SHALL CONDUCT PROFESSIONAL BUSINESS SO AS TO PROTECT THE PRIVACY AND MAINTAIN THE PERSONAL INTEGRITY OF THE INDIVIDUAL”**
 - **“SHALL MAKE REASONABLE EFFORTS TO PROTECT THE INDIVIDUAL FROM CONDITIONS HARMFUL TO HEALTH AND SAFETY, INCLUDING HARMFUL CONDITIONS CAUSED BY TECHNOLOGY ITSELF”**

POPULATION TARGETED

Why would an educator want to use video-based apps?

**Behavioral issue
analysis &
intervention**

**Child receives
feedback on reading
fluency, expression,
and accuracy**

**Theater – children
can receive
feedback on a
performance**

**Teacher
observations**

And more!



How has the use of video-based apps changed since this study was published in 2015?

RESEARCH QUESTIONS

What are the goals of video recording and how much video is necessary for this goal?

Who needs to provide permission?

Who needs to see the videos collected?

What level of consent is needed?

What level of confidentiality is wanted?

What level of protection is needed or storing the data?

Who controls how a video gets recorded, edited, and uploaded?

How long is it necessary to archive a video and when (if all) will it be deleted?

TARGET TECHNOLOGY

How can you design an app where hearing-impaired children can upload videos themselves reading or signing a passage for their teachers to monitor their literacy progress and provide them with feedback on their performance?

Safety of child without compromising the data the educator needs?

KEY ASPECTS OF RESEARCH DESIGN

- **CONCERNS:**

- **RISK OF DATA BEING STOLEN BY HACKERS OR CHILD PREDATORS – DATA SECURITY**
- **INCREASE IN MOBILE TECHNOLOGIES WITH BUILT-IN CAMERAS – PRIVACY**
- **DATA COLLECTION**
- **CONSENT FOR DATA COLLECTION**

- **ADHERENCE TO:**

- **COPPA**
- **AECT'S CODE OF ETHICS**

- ***WE ADVISE CHILDREN ON HOW TO USE THE WEB, BUT WE DON'T ADVISE THOSE DESIGNING THE SOFTWARE FOR THE WEB***

EVALUATION – RESEARCH QUESTIONS

- **WHAT ARE THE GOALS OF VIDEO RECORDING AND HOW MUCH VIDEO IS NECESSARY FOR THIS GOAL?**
 - **STORY RETELL ALLOWS STUDENTS TO RECORD ASSIGNMENT VIDEOS ON THEIR OWN TIME AND PROVIDE THEIR INSTRUCTORS WITH ACCESS TO THEIR SUBMISSIONS**
- **WHO NEEDS TO PROVIDE PERMISSION?**
 - **STORY RETELL WILL OBTAIN PERMISSION FROM THE PARENTS AND CHILDREN INVOLVED**
 - **PARENTS – LETTER HOME, LOG INTO STUDENT ACCOUNT, ADD THEIR EMAIL**
 - **COMPLIES WITH COPPA REQUIREMENT FOR PARENTAL PERMISSION**
- ***WHAT IF A STUDENT STARTS USING THE ACCOUNT BEFORE A PARENT SIGNS UP TO USE THE SERVICE/GIVES PERMISSION?***
 - ***WOULD NEED A MECHANISM IN THE SOFTWARE FOR VERIFYING A PARENT HAS GIVEN PERMISSION AND COMPLETED THE NECESSARY FORMS***

EVALUATION – RESEARCH QUESTIONS

- **WHO NEEDS TO SEE THE VIDEOS COLLECTED?**
 - **TEACHERS INVOLVED IN THE INSTRUCTION OF THE STUDENT**
 - **RESEARCHERS WILL REVIEW SYSTEM VIDEOS TO DETERMINE SYSTEM USABILITY, UNDERSTAND TEACHER/INSTRUCTOR USAGE, AND ASSESS STUDENT PERFORMANCE IMPACT**
- **WHAT LEVEL OF CONSENT IS NEEDED?**
 - **SEPARATION OF WHO CAN VIEW THE DATA AND RECORDING OF DATA**
 - **DECISION BETWEEN:**
 - **I DO NOT WISH TO HAVE MY CHILD RECORDED**
 - **I AGREE TO HAVE MY CHILD RECORDED, BUT ONLY TEACHERS AND RESEARCHERS CAN VIEW THE VIEWS**
 - **I AGREE TO HAVE MY CHILD RECORDED AND IT CAN BE SHARED IN PROFESSIONAL JOURNALS OR CONFERENCES**
 - **I AGREE TO HAVE MY CHILD RECORDED AND THE VIDEO MAY BE PUBLISHED ON THE UNIVERSITY WEBSITE**
 - **COMPLIES WITH PARENTAL DISCLOSURE REQUIRED BY COPPA**

EVALUATION – RESEARCH QUESTIONS

- **WHAT LEVEL OF CONFIDENTIALITY IS WANTED?**
 - **TEACHERS NEED STUDENT FACIAL GESTURES TO ASSESS UNDERSTANDING OF A PASSAGE – CAN'T PIXELATE IDENTITIES TO MINIMIZE IMAGES**
 - **CREATION OF UNIQUE CODE NUMBERS FOR EACH STUDENT, SIMILAR TO GMU #**
 - **COMPLIES WITH COPPA FOR MINIMIZING THE UNIQUE IDENTIFIERS**
- **WHAT LEVEL OF PROTECTION IS NEEDED OR STORING THE DATA?**
 - **PASSWORD-PROTECTED WEBSITE WITH LIMITED PASSWORD COMPLEXITY REQUIREMENTS**
 - **STORE VIDEOS ON A AN ENCRYPTED FILE SERVER WITH FIREWALL PROTECTION**

EVALUATION – RESEARCH QUESTIONS

- **WHO CONTROLS HOW A VIDEO GETS RECORDED, EDITED, AND UPLOADED?**
 - **STUDENTS CONTROL WHICH VIDEOS ARE RECORDED, UPLOADED, ETC.**
 - **IDEA: “ENCOURAGE STUDENTS TO USE THE SYSTEM WITHOUT FEAR OF MAKING MISTAKES”**
- **HOW LONG IS IT NECESSARY TO ARCHIVE A VIDEO AND WHEN (IF ALL) WILL IT BE DELETED?**
 - **RESEARCHERS: MONITOR THE SYSTEM WEEKLY AND REMOVE VIDEOS THAT DON'T ADHERE TO THE GUIDELINES FOR VIDEO RECORDING**
 - **TEACHERS: HAVE THE ABILITY TO REMOVE UNSUITABLE VIDEOS**
 - **VIDEOS OLDER THAN 3 YEARS ARE PURGED FROM THE SYSTEM**



GUIDELINES FOR VIDEO RECORDING

- **RECORD VIDEO IN NEUTRAL SETTINGS AND WITH NEUTRAL CLOTHING**
- **AVOID ACCIDENTALLY RECORDING NON-PARTICIPANTS IN THE BACKGROUND**
- **BE CAREFUL NOT TO ACCIDENTALLY RECORD COPYRIGHTED MATERIAL IN THE BACKGROUND**
- **FAMILIARIZE PARTICIPANTS WITH THE VIDEO RECORDING PROCESS TO MINIMIZE “ACTING”. ALTERNATIVELY, RECORD LIBERALLY, BUT ARCHIVE VIDEO ONLY WHEN TARGET BEHAVIORS OR SKILLS ARE DISPLAYED**
- **REMIND CHILDREN TO AVOID REVEALING PERSONAL INFORMATION IN THE VIDEOS**

REFERENCES

FEDERAL TRADE COMMISSION (2013A). CHILDREN'S ONLINE PRIVACY PROTECTION RULE; FINAL RULE [ELECTRONIC VERSION]. FEDERAL REGISTER, 78(12), 3972 - 4014. RETRIEVED FROM [HTTP://WWW.GPO.GOV/FDSYS/PKG/FR-2013-01-17/PDF/2012-31341.PDF](http://www.gpo.gov/fdsys/pkg/fr-2013-01-17/pdf/2012-31341.pdf)

ZYDNEY, J. M., & HOOPER, S. (2015). KEEPING KIDS SAFE FROM A DESIGN PERSPECTIVE: ETHICAL AND LEGAL GUIDELINES FOR DESIGNING A VIDEO-BASED APP FOR CHILDREN. TECHTRENDS, 59(2), 40-46. [HTTPS://DOI.ORG/10.1007/S11528-015-0838-X](https://doi.org/10.1007/s11528-015-0838-x)

DISCUSSION POINTS

- **RQ: WHO NEEDS TO PROVIDE PERMISSION?**
 - **IF THERE ARE TWO GUARDIANS, ONE CONSENTS AND THE OTHER DOES NOT, WHAT DO YOU DO?**
- **MENTIONS “VIDEOS SHOULD ALSO BE VIEWED ON A REGULAR BASIS BY THE WEBSITE OPERATORS TO ENSURE THAT THEY MEET THE GUIDELINES SET FORTH TO ENSURE THE CONFIDENTIALITY OF THE CHILDREN”**
 - **WHO ARE THESE OPERATORS?**
 - **HOW IS OPERATOR ACCESS CONTROLLED/REGULATED?**
- **RQ: HOW LONG IS IT NECESSARY TO ARCHIVE A VIDEO AND WHEN (IF AT ALL) WILL THE VIDEO BE DELETED?**
 - **IN THEIR EXAMPLE, THEY LIMIT THE RESULTS TO 3 YEARS – REMOVED AFTER 3 YEARS. RECOMMEND SHIFTING TO 6 MONTHS OR YEARLY**
- **HOW HAS THE USE OF VIDEO-BASED APPS CHANGED SINCE THIS STUDY WAS PUBLISHED IN 2015?**
- **PROVIDED A SAMPLE GUIDELINE FOR TAKING VIDEOS – NOT AS RELEVANT FOR DEVELOPERS**