

Action Research Plan

Keyboarding Skills

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Section I

Introduction

In today's world, technology is ever more prevalent. Nearly everywhere you go, people are using computers or tablets to complete their work. I, personally, use a computer nearly all day long, every day, whether it is checking scores or typing emails. Keyboarding skills are a seemingly more and more necessary life skill. Based on a preliminary canvas of community stakeholders, physical keyboards and the needed skills to use them are incredibly valuable to productivity within the workforce. With the advent and prolific use of tablets, touch-screens, and smartphones, are students losing these keyboarding skills?

Area of Focus Statement

The purpose of this study is to discern if requiring students to use physical keyboards throughout their school day will help to improve their overall typing skills (accuracy and words per minute).

Research Questions

How would requiring students to only use the physical keyboards provided instead of "swiping" on an on-screen keyboard improve student typing skills?

- How does already being familiar with at least the layout of a keyboard (on-screen keyboards are usually the same QWERTY layout as physical keyboards) affect the typing skills of students vs those who are not familiar?
- How do students feel about typing overall?

- What extra resources are there for helping students develop their typing skills?
- What do community stakeholders think about typing skills?

Related Literature

Most of the related literature I found is about how keyboarding may affect development of students, how it relates to the English Language Arts, and if it contributes to technology anxiety.

There was very little research that related directly to my research questions. However, I did find some literature helpful, such as information about touch-typing and keyboard covers vs. no keyboard covers. Please see the [Literature Matrix](#).

Description of Intervention

The intervention that will be put into place will be two-fold:

1. Students will only be allowed to use a physical keyboard vs. “swiping” on an on-screen keyboard.
2. Students will participate daily in a keyboarding program to be decided by the teaching team and administration.
 - a. Data from student use of the keyboarding program will be collected and assist in determining next steps for each student individually.

Section II

Overview of Data Collection Strategies

My overall data collection approach is a series of surveys filled out by various stakeholders, including teachers, students, families, and community workforce.

Data Sources

My major data sources are the answers to a series of surveys filled out by various stakeholders, as well as keyboarding skill tests administered to students. Please see the [Data Collection Matrix](#).

Data Analysis Plans

To analyze the data, I would code the surveys, interviews, and observations for commonalities. Please see this [Sample Survey](#). I would also use descriptive statistics to interpret the outcomes of the keyboarding tests. Please see the [Data Analysis Matrix](#).

Section III

Action Plan Questions

1. The other people involved in my action research project would be my administrator and a few other teachers. They would assist in the administration and collection of data - mostly the keyboarding tests. Students would, of course, be part of the research, as the data will be collected from them specifically.
2. Prior to undertaking my project, I would need my administrator's permission. Since the research would occur throughout the regular course of a school day, all I would require is the "ok" to go ahead and survey the stakeholders. The keyboarding tests are already occurring in my regular classes.
3. The projected timeline for:
 - a. Collecting data: 1 week
 - b. Analyzing data: 1 week
 - c. Interpreting data: 1 week
4. The projected timeline for developing my recommended actions is 2-3 weeks.
5. My overall strategy for implementing any recommended actions would be to:
 - a. Call a meeting with my teaching team and administrator
 - b. Present data collected and recommendations
 - c. Decide if a monetary budget is required
 - d. Devise a team plan for who implements what beginning at the next quarter

- e. Plan dates for further data collection
6. My process for ongoing monitoring would be to continue to collect data through keyboarding skills and to periodically survey community stakeholders. Parents and staff can be surveyed during our twice yearly school survey. Community workforce can be surveyed with our yearly wishlist mailer.

References

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Appendices

[Appendix A](#)

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Appendix A

Literature Matrix

Area of Focus Statement The purpose of this study is to discern if requiring students to use physical keyboards throughout their school day will help to improve their overall typing skills (accuracy and words per minute).

Statement/Observation With the advancement of technology and touch screens, students seem to be losing their ability to type quickly and accurately.

Research Question How would requiring students to only use the physical keyboards provided instead of "swiping" on an on-screen keyboard improve student typing skills?

Author/s	Year	Variables Considered in the Study						
		Familiarity w/ Keyboard Layout	Student Attitude about Typing Skills	Stakeholder Attitude about Typing Skills	Extra Resources Available	Typing Resources	Family Background	Peer Attitude
Kercher, McClurg	1985	*						
Developing...	1986	*		*		*		
Reagan	2000	*	*	*	*	*		
Fidanque	1986	*				*		
Duran	2013		*	*	*			
Davis	2015		*	*	*	*		

Appendix B

Data Collection Matrix

Area of Focus Statement	The purpose of this study is to discern if requiring students to use physical keyboards throughout their school day will help to improve their overall typing skills (accuracy and words per minute).
Statement/Observation	With the advancement of technology and touch screens, students seem to be losing their ability to type quickly and accurately.
Research Question	How would requiring students to only use the physical keyboards provided instead of "swiping" on an on-screen keyboard improve student typing skills?

Sub-Questions	Data Sources		
	1	2	3
How does already being familiar with at least the layout of a keyboard (on-screen keyboards are usually the same QWERTY layout as physical keyboards) affect the typing skills of students vs those who are not familiar?	In-class observation	Surveys	Interviews
How do students feel about typing overall?	In-person survey	On-line survey	Interviews
What extra resources are there for helping students develop their typing skills?	Library research	Magazine articles	Interviews w/ teachers/admins
What do community stakeholders think about typing skills?	In-person survey	On-line survey	Interviews

Appendix C

Data Analysis Matrix 9417 Action Research

AREA OF FOCUS: The purpose of this study is to discern if requiring students to use physical keyboards throughout their school day will help to improve their overall typing skills (accuracy and words per minute).

RESEARCH QUESTION: How would requiring students to only use the physical keyboards provided instead of "swiping" on an on-screen keyboard improve student typing skills?

Data Collection Technique	Data Analysis Strategy		
	1	2	3
1. Survey of Student attitude about typing.	Compile means of each item on scale on survey Code for commonalities.	Group items with mean scores over xxx and mean scores under xxx to identify areas of satisfaction and dissatisfaction	Compile and organize open ended questions and look for trends
2. Survey of Community Stakeholders about importance of typing skills.	Compile means of each item on scale on survey Code for commonalities.	Group items with mean scores over xxx and mean scores under xxx to identify areas of satisfaction and dissatisfaction	Compile and organize open ended questions and look for trends
3. Student interview about familiarity with keyboard layout, if it affects typing skills	Analyze the physical interview data, non-verbal communication	Read transcript – look for themes	Compare interview notes with recorded interview
4. Research typing skills resources available to schools	Compile and organize data	Develop checklist for identifying desired traits in a typing program	Have students test and rate programs
5. Typing Skills Pre-Test	Use descriptive statistics to interpret outcomes	Note common or recurring mistakes among test-takers	Highlight problem areas, success areas
6. Typing Skills Post-Test	Use descriptive statistics to interpret outcomes	Note common or recurring mistakes among test-takers	Highlight problem areas, success areas, improved areas

Appendix D

3/9/2018

Your Workplace

Your Workplace

Please answer the following questions using your own personal opinion. All answers should reflect your opinion as an individual and should not be representative of any company or other entity you may be associated with.

* Required

1. **Email address ***

2. **What is your name? ***

3. **What is your job title? ***

4. **Do you use a computer keyboard at your job?
If so, how often? ***

5. **Do others use a computer keyboard at your
workplace? If so, how often? ***

6. **How important are good keyboarding skills to have in your workplace? ***

Mark only one oval.

1 2 3 4 5

Not important Extremely important

7. **Would your workplace hire someone who did not have good keyboarding skills? ***

Mark only one oval.

- Yes
 No
 Maybe

3/9/2018

Your Workplace

8. How do you believe having keyboarding skills would affect the employability of an individual in the modern-day work force? *

Workforce in General

Please answer the following questions using your own personal opinion. All answers should reflect your opinion as an individual and should not be representative of any company or other entity you may be associated with.

9. How important do you, personally, think having good keyboarding skills is? *
Mark only one oval.

1 2 3 4 5

Not important Extremely important

10. Please explain why you think having good keyboarding skills is or is not important. *

11. Do you believe keyboarding skills should be taught in school? *
Mark only one oval.

Yes
 No
 Maybe

12. Do you believe keyboarding skills are a necessary life skill? *
Mark only one oval.

Yes
 No
 Maybe

3/9/2018

Your Workplace

13. Please add any additional thoughts or comments you have about keyboarding skills. *

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