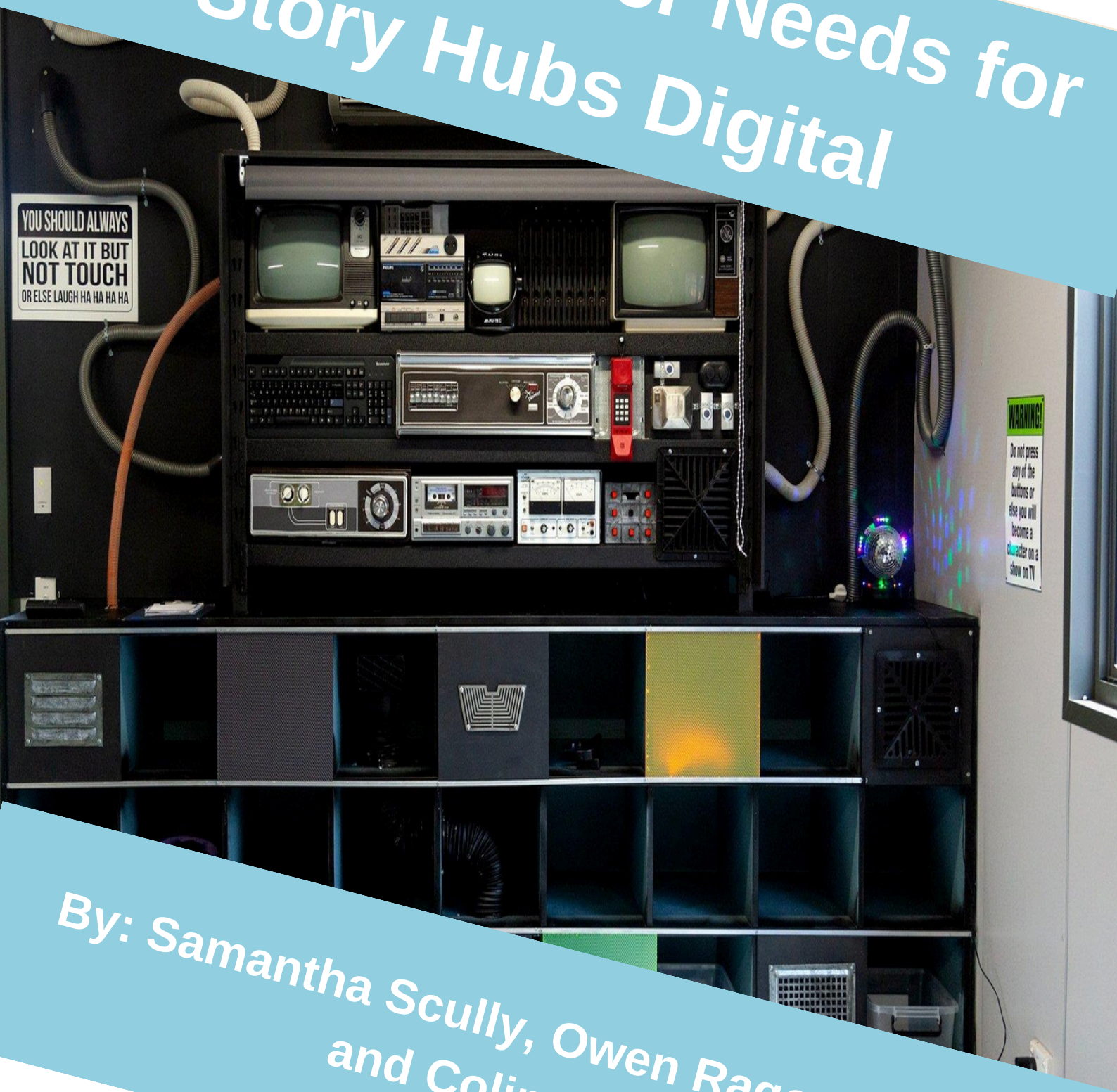


Analysis of User Needs for Story Hubs Digital



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and Colin Gallagher

May 1st, 2024

Analysis of User Needs for Story Hubs Digital; A Teacher Resource Hub

An Interactive Qualifying Project Report
submitted to the Faculty of
WORCESTER POLYTECHNIC INSTITUTE
in partial fulfillment of the requirements for the
Degree of Bachelor of Science

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May 1st, 2024

Report Submitted to:
Jessica Tran
100 Story Building



Professor Bethel Eddy and Professor Stephen McCauley
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This report represents the work of one or more WPI undergraduate students submitted to the faculty as evidence of completion of a degree requirement. WPI routinely publishes these reports on the web without editorial or peer review.

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Abstract

100 Story Building (100SB) works with teachers and students to help develop their abilities to be creative. They are in the process of creating a digital component to their Story Hubs program which would allow teachers to have access to creative resources remotely. We worked with staff and teachers to understand their needs and pass them on to 100SB. Additionally, we researched similar resources and provided recommendations based on what we have seen and learned.

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Authorship

Colin worked on the Competitor Research Findings section and made the competitor research comparison chart.

Eli was the primary writer of the Methods section. He also worked on the Introduction and Background sections and edited portions of the paper.

Owen was the primary writer on the Executive Summary and Creating User Journeys section of the Methods. He was also one of the main contributors to the Findings and Recommendations sections. Additionally, he contributed to writing edits and suggestions for all parts of the paper.

Samantha was the primary writer of the Introduction, Background, Teacher Interview Findings, Staff Interview Findings, and Recommendations portion of the paper. She was also a contributor to the Methods section. Finally, she was the primary editor for the majority of the paper.

Executive Summary

Like in the United States, Australia's education system faces challenges. Student standardized testing scores have been consistently declining for the past two decades. Teachers in Australia have also been struggling with low wages, increasing responsibilities, lack of time, and especially a lack of support. These systemic conditions, and more recently COVID-19, have contributed to increasing teacher shortages as the workforce struggles to deal with growing teacher demand due to Australia's population boom. Our sponsor, 100 Story Building, is a non-profit working to help increase teacher and student engagement via creativity to help solve these problems. They focus on nurturing creativity in students, allowing them to break away from the typically rigid and rather unengaging lesson plans in standardized curricula. One way 100 Story Building has been doing this is through its Story Hubs program. This program focuses on providing teachers with tools to foster creativity in their own classrooms.

100 Story Building is looking to expand its Story Hubs program into the digital space to have a longer-lasting, more impactful effect on participating teachers. Story Hubs Digital will be a digital repository of resources that will allow teachers to access activities and ideas outside of professional learning workshops, both during and after the end of the program. The platform will also host activities created by teachers and submitted to the site, with the hope that this will help facilitate a living creative community as teachers both post their own work and get inspired by the work their colleagues are doing. We have contributed to this project by researching competitors, interviewing forecasted users, and organizing the responses and potential solutions to user needs into an understandable format.

We began by learning about 100 Story Building (100SB) and what they represent through speaking with staff, looking through the work they have done, and independent web research. From this new understanding, we focused on what separates 100SB from other organizations with similar goals. We looked into groups with digital resource repositories comparable to 100SB's goal for Story Hubs Digital, like Cool.org and 826 Digital. This gave us a starting point when interviewing both staff and teachers by giving us perspective on different aspects of a possible product. The examples we found would later be vital to our interviews with teachers and staff by being a visual means by which we could directly get feedback on website features.

Executive Summary

Our interviews with staff and teachers started open-ended, prioritizing learning about interviewees' wants and aversions. This information led to important discoveries of what teachers lacked, such as time and confidence in their own creative abilities. We then organized these findings into a more understandable format called User Journeys.

Our User Journeys are composed of nested user needs and wants, allowing both broad and specific user needs to be easily visualized and connected. This is how our sponsor requested that we present our findings, and also allowed us to conveniently link suggestions to specific user needs. We also organized our recommendations into categories based on the features of the website they would be most relevant to. This allowed us to provide additional details on why we came to those conclusions and give a more in-depth explanation of the specific feature. Our User Journeys helped shape our project by being a centralized place where we mapped the relationships between our findings and developed many of our recommendations. Interviews, research, and our recommendations were all impacted by the additional conclusions we drew from this formatted data.

Based on the vast and various information we learned we developed a variety of recommendations for Story Hubs Digital. The most common and important piece of information we gathered from teachers is that their lack of time greatly impacts how they use resources. We learned that the website needs to be direct and its contents quick and efficient. We recommend implementing a tagging system, which we have seen in use in competitor websites like Cool.org and 826 Digital. Such systems allow users to find relevant activities swiftly by easily filtering in or out important parameters like resource type or age level. Additionally, it is important to have a variety of formats in which activities can be viewed to match the preferences of different users. It is also important to keep the smaller things efficient, such as having a simple account and login system.

Another key aspect of the website we focused on in interviews was the ability to upload one's activities and lessons to Story Hubs Digital. Teachers were again worried about the time commitment required and that they would need any sharing process to be quick and easy. Incentives were also mentioned while discussing how to get teachers to share their activities with 100 Story Building and fellow teachers. Creating a way to receive positive feedback on uploaded materials would be a simple way for teachers to see that they are appreciated and motivate them to continue this work that grows the platform.

Executive Summary

A final key recommendation for the website is that the materials should be malleable and that teachers should be able to change them to fit their styles. One wish that teachers offered in multiple interviews was for them to be able to make personal edits to resources. This requires more work and we believe an effective alternative would be to provide a collection of different formats of documents such as Google Docs or PDFs, that can be easily downloaded and edited for personal use.

To conclude, Story Hubs Digital's key users have a variety of important needs and even more ways to solve them. Our goal was not only to share our recommendations with our sponsor but to thoroughly explain how we came to those solutions. We wished to make sure that the reasoning behind every recommendation was made available to our sponsor so they could come to their own conclusions if ours did not match their vision. We hope this process will lead to the final Story Hubs Digital product better catering to teacher's needs.

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Introduction

Introduction

The 100 Story Building (100SB) group is a Victoria based not-for-profit focused on improving the creative abilities of local disadvantaged students. This is done through a combination of short term workshops and long term collaborations with schools. One of their most impactful programs is a multi-year, in-school installation called “Story Hubs” that is not connected to any specific curriculum and encourages students and teachers alike to practice their creative abilities. After the period of direct involvement from 100SB ends, the intention is that teachers will have built the necessary skills to continue promoting student creativity themselves with the success that 100 Story Building has had.

As a next step in this program’s process, 100SB decided to incorporate a digital component into their Story Hubs program. This would act as a repository of materials created by 100SB that could be accessed by Story Hubs teachers independently, as well as a place for teachers to potentially share their own materials. To do this, they asked our group to consult with the staff of 100SB, as well as Story Hubs teachers, to create a list of needs for this website to be everything 100SB envisions it being. Our findings were then organized into User Journeys, where overarching issues can be connected to the desires of teachers and staff alike, shaping our final recommendations.

Background

Background

In this section, we discuss Australia's declining test scores, and how external factors such as language background and household income can impact a student's performance in literacy testing. Additionally, we touch on the strain on teachers and its effect on young people. We then introduce 100 Story Building and review the work they have been performing prior to this project. Finally, we explore the nature of Story Hubs Digital and its inception.

Challenges within the Australian Education System

Like many places, Australian students face difficulties in their education system. When compared to previous groups of students, achievement in Australia has been declining for the past two decades. This can be best demonstrated by the Australian results on the Programme for International Student Assessment (PISA) standardized test, which is administered every three years to 15-year-olds in 81 countries. As seen in Figure 1, the three target areas of reading, mathematics, and science have been on the decline since the early 2000's.

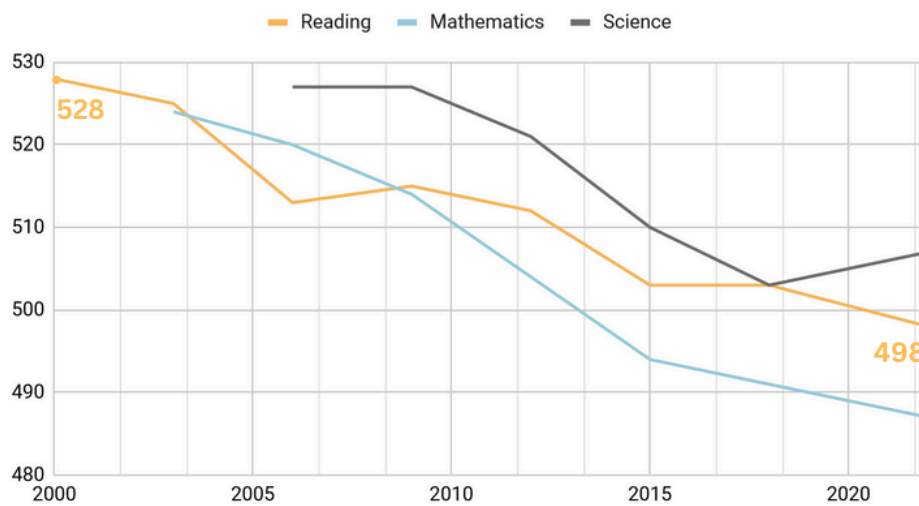


Figure 1: Trends in Performance in Reading, Mathematics and Science. Source: OECD, PISA 2022 Database, Tables I.B1.5.4, I.B1.5.5 and I.B1.5.6.

Background

Additionally, while students of any background can struggle in school, the issue is exacerbated in areas that are under-resourced and/or situated in lower-income or immigrant communities (Australian Institute of Health and Welfare 2022). This means that students who do not speak English as a first language, indigenous children, and those who are located in more rural areas face increased difficulties. Figure 2 displays year five students divided into population groups, and then shows the percentage of each group that has reached the minimum literacy standard.

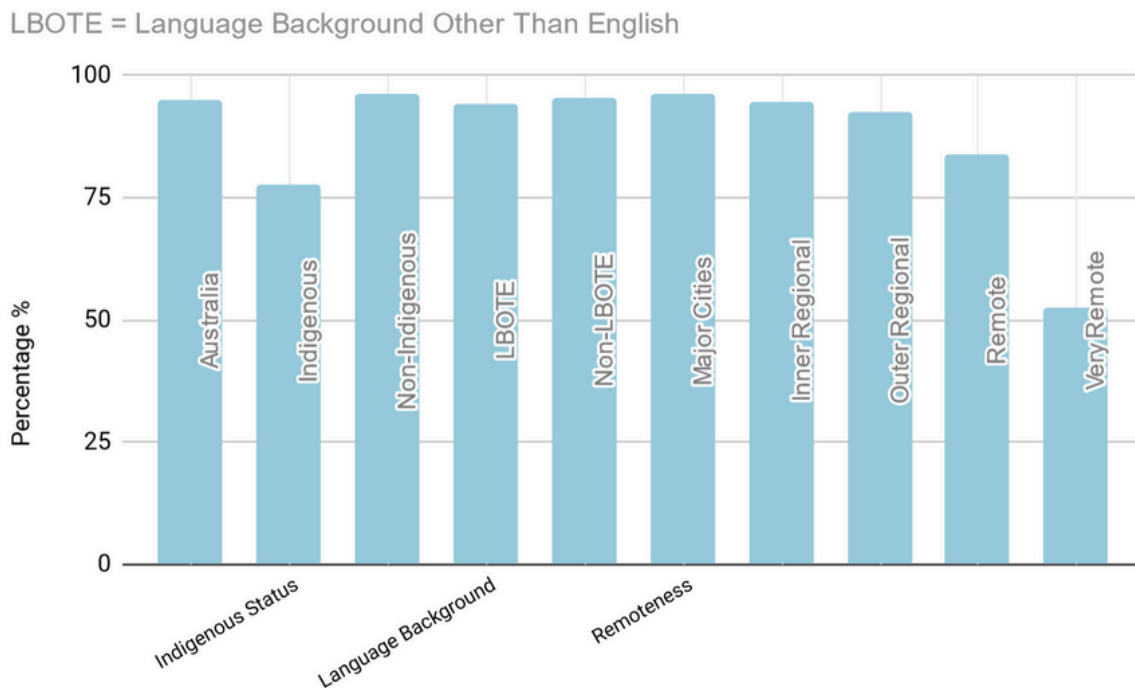


Figure 2: Year 5 Students Who Achieved at or Above The National Minimum Standard For Reading, by Selected Population Groups. Source: Australian Institute of Health and Welfare 2022.

Background

In Figure 3, areas of Queensland were divided into 5 sections based on the socioeconomic status of the area in which they live, with quintile 1 being the most disadvantaged group, and quintile 5 being the most advantaged group, and then split into categories of high or low income. Students living in less advantaged areas tended to perform worse in literacy skills than their peers in higher income areas, and students in low income households always performed worse than their peers living in high income households.

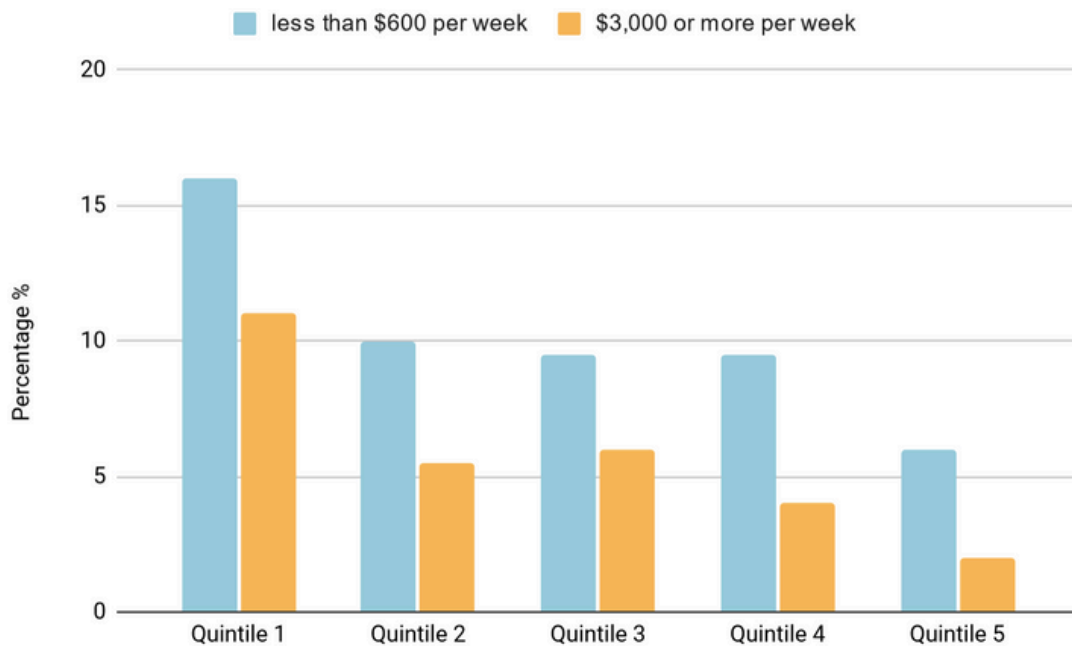


Figure 3: Government students in Queensland divided by Socioeconomic Indexes for Areas and household income. Source: Australian Bureau of Statistics 2014

During the last twenty years, as educational performance for Australia's students has been falling, educational funding has continued to rise. While sufficient funding is essential to a student's overall achievement, recent data tells us that simply increasing the amount of money a school receives will not fix the problem. In the book *Improving a country's education: PISA 2018 results in 10 countries*, Portuguese statistician Nuno Crato suggested that school funding will only improve educational outcomes up to a certain level. He suggested that this limit is equal to USD\$89,000 per child over a student's entire academic career. Australia spends an average of USD\$230,000. Rather, curriculum is the most important factor in determining results (Crato 2021).

Additionally, Australia's struggle with student performance is further strained by the ongoing teacher shortage; the country is projected to face a shortfall of 4,100 teachers by 2025 (Clare, 2022). This lack of professional teachers is driven by multiple factors, including a 17% decline in people completing initial teacher education courses, an 11% projected student body growth by 2031, and 45% of teachers over fifty planning on leaving the profession in the next five years (Clare, 2022). Non-competitive compensation is another important issue when it comes to pursuing or continuing a career in education. As Clare states "Australia's top teacher salary is only 40 percent higher than the starting salary, significantly below

Background

the [Organization for Economic Co-operation and Development (OECD)] average of 80 percent,” (Clare, 2022). This means most people would be better off not working as a teacher, or if they want to stay in education, moving into a school leadership role instead (Clare, 2022). The Covid-19 pandemic also brought in new feelings of disillusionment and created a divisive educational environment, which is now causing teachers to lose their motivation and altruistic urge to help which brought them into the field in the first place. In teachers under the age of 50, 13% plan to leave in the next 5 years, a drastic rate of loss of mid-career teachers. That number increases to 45% of teachers over 50 (Clare, 2022). This is of great concern given 36% of teachers are over 50 (Australian Teacher Workforce Data, 2021).

Current proposals to solve this problem focus on bringing in international teachers, but that is only a bandage solution. Teachers are not an infinite resource, and if the rates of new teachers continue to diminish as existing teachers leave the profession, eventually there will be no educators left. The core issue cannot be resolved without understanding how to stop losing mid-career teachers.

100 Story Building

100 Story Building (100SB) is a non-profit organization based in Melbourne, Victoria, Australia that uses storytelling as a tool to help foster imagination, confidence, and literacy in children and young people. This organization focuses on helping the most marginalized children and communities in the Melbourne area by giving them tools to help explore their creativity and thus enhance their education, particularly their writing skills. 100SB accomplishes this with programs designed for both students and teachers.

Early Harvest is the main student-based program at 100SB, which, through a combination of in-school and after-school workshops, encourages students to engage with different aspects of story creation, such as forming plots and developing characters. This work is then compiled, edited, illustrated, and sold as an anthology book, both to give students a sense of accomplishment and to help fund 100SB's programs.

The flagship teacher development based program for 100SB is called Story Hubs, which is the main focus of this project. Story Hubs is a multi-year teacher development program that helps teachers learn skills to support creativity and student engagement. At the beginning of the program, the school community comes together, and in collaboration with both 100SB and a local artist, a “Story Hub” is created. These are often, but not always, dedicated spaces within the school that are designed to enrich its creative ecology. Because each Story Hub is designed by students and teachers together, it is tailored to the individual school it resides in and is a visible expression of student agency. Schools without the space for an entire room to become a Story Hub can get innovative and create mobile Story Hubs instead. A Story Hub can look like anything, using installations from local artists such as murals, secret doorways, or duochrome prism “portals” to help tell the story that has been crafted. Often, the Story Hubs involve an unfamiliar world, such as outer space or an alternate dimension, which is symbolic of this new



Figure 4: South Geelong Story Hubs

Background

world of creative possibility that the students enter. This unique approach creates an environment that encourages students to work together and be more creative by working in a space not found in typical classrooms

Through a combination of student-focused workshops, teacher professional development programs, and long term collaborations with schools, 100SB has already reached a variety of communities in the Melbourne area. However, 100SB is a small organization and is limited in the time it can dedicate to any group. To help resolve this, they have decided to give teachers access to some of the resources they have curated over the years, allowing teachers who are a part of their long term collaborations to access 100SB material without needing to contact 100SB. Additionally, 100SB wants to empower its teacher collaborators to create their own activities, allowing them to share work with other teachers in their greater community and learn from one another.

Story Hubs Digital

To give teachers access to the materials from 100 Story Building, and create a space for teachers to share the materials they made, 100SB intends to build a website called Story Hubs Digital. This website will be the key to the next stage of Story Hubs, creating an online space that not only holds the material used in the real world Story Hubs, but expands upon it, allowing participating schools to gain even more from the Story Hubs program after their training ends (Refer to Appendix C). The main goals of this website are to give teachers easier access to support and resources concerning Story Hubs, as well as to share a variety of digital resources that can be used by teachers to make new, creative lesson plans. It will also be a space for teachers to collaboratively share resources they have created and used in their own classrooms.

The staff of 100SB will also use the website as a tool to assist with professional learning workshops they perform with teachers. It will integrate into Story Hubs teacher training, so teachers can get used to it and learn how to access its resources. It will also be a critical research opportunity for 100SB to learn about how teachers use their resources. This information will help 100SB modify this digital platform and develop marketing materials to further Story Hubs' growth.

Methods

This project was intended to support 100 Story Building (100SB) in the creation of their digital Story Hubs platform by researching the needs of their key users. To accomplish this, we had three main objectives. The first was to gather information on competitors - educational websites similar to Story Hubs Digital. While doing this we were particularly interested in the ways that they solved challenges specific websites designed to support teachers. By analyzing their solutions, we were able to improve recommendations for this product. The second objective was to gain insight into the intended audience of Story Hubs Digital. These key users were broken into two subgroups, teachers and the staff of 100SB. This was done through interviews with the key users. Questions focused on what they want to see incorporated into Story Hubs Digital and how we can best fulfill their needs. Our final objective was to create User Journeys to reflect the information we learned. These user journeys map how different people interact with the website, their particular needs and solutions to those needs. The map is a convenient way to group findings from our research, and justify the solutions we have come too with the root problems they are meant to address. This ensures the elements of the website align with documented common needs.

Analysis of Competitor Websites

Our first objective involved gathering information from websites in a similar niche to Story Hubs Digital. To do this, we visited each website and took note of anything we found that stood out to us. We specifically focused on features that we found to be potentially beneficial to Story Hubs Digital, or anything we found that we wanted to ensure was not incorporated into the final product. We also looked for inspiration on ensuring professionalism while maintaining an engaging atmosphere that excites users. The websites we looked into were 826 Digital, ACEReSearch, ARTS:LIVE, Cool.org, Learning and Teaching Repository (Department of Education, Australian Government), Scootle, and TeachersPayTeachers. These websites, except ACEReSearch and Learning and Teaching Repository, are resource libraries that teachers can use for lesson planning and finding new activities. The others, instead, are collections of research and higher education learning materials that are primarily used by educators for teacher professional learning. Some of the resource library websites also included professional learning resources in addition to student facing materials. This is the model that Story Hubs Digital intends to follow, so these websites were of particular interest.

There were some limitations when looking at the competitor websites. A major limitation in our work was that many websites have sections hidden behind paywalls or required academic credentials to access, which prevented us from seeing these websites in their full form. The only website we had login access to was Cool.org. This allowed us to access it's personal dashboard features and see more details on some of it's content, but otherwise did not change the greater user experience. Due to this, we do not believe that the lack of login access to other websites significantly impacted what we gained from this research.

Understanding the Needs of Key Users

For this objective, we conducted interviews with intended user populations to better understand, and thus cater to, their needs. Two main populations were interviewed, teachers and 100SB staff. These are the two key user groups for Story Hubs Digital and the focus of this project.

All the teachers we interviewed were in their second or third year of the Story Hubs program. This meant that they had a good knowledge of 100 Story Building as an organization and the Story Hubs program. However, they were still learning from 100SB; this facilitated our interviews as all were done as the end of scheduled professional learning sessions. The focus for the teacher interviews was on how the website can complement what they have learned from the training, both as they finish the program and once they complete the program and continue to use what they have learned. The questions we asked focused on the website's function as a resource repository. Questions also focused on how to facilitate teachers posting their own materials to the website. A subset of the teachers we interviewed were new to their schools and had not been there for the entirety of the Story Hubs program. These were especially helpful in learning how the website can best work with assistance from veteran Story Hubs teachers to allow recently hired teachers to quickly learn it. Finally, these interviews added into our competitor research by allowing us to gain teacher insights on those competitors as well as pointing us to competitors we did not know of previously. These interviews were conducted with small groups of two to three teachers, and usually lasted from ten to twenty minutes. A sample list of questions for these interviews can be found in Appendix A.

Interviews with 100 Story Building staff had two main goals: to learn about their vision for the overall website, and to learn how they would use the website to fulfill their duties. A sample list of questions for these interviews can be found in appendix B. This group was especially important because they will be the first users of the website and will need to seed it with its first content. If they find the website too difficult to navigate or otherwise unsatisfactory, it will never be used. Additionally, they are our project sponsors and in charge of the greater project, so it was very important that we learn of their vision so we could match it. Interviews with 100SB personnel were done individually and usually lasted about thirty minutes, though some were up to an hour and a half.

Some of the interviewees were not directly connected to Story Hubs Digital; these interviews were conducted to gain a sense of the organizational culture as well as get a broader set of ideas for how the website could be used by different parts of 100SB. It should also be noted that beyond formal interviews there were many informal discussions and project check-ins that informed our design for the website.

There were some limitations in these interviews. As with all interviews, participants' truthfulness and openness determine the value of the data gathered. This cannot be overcome, as we have no way of determining if a participant is being honest and interviewees can choose what they do or do not tell us. That said, we do not believe that these limitations were a substantial block for this research goal. All interviewed participants had a vested interest in the success of the project and nothing to gain by being less than truthful.

Creating User Journeys

To organize and further develop our findings we created User Journeys. These User Journeys were developed as a deliverable that 100SB can use to help understand our findings and suggestions. Each User Journeys begins with an overarching issue. These overarching issues are the most common and significant problems that we heard of during the data gathering phase of this project and are the root of smaller problems. We found these to be a lack of time, self-confidence, and the goal of discovering new things. We split these overarching issues into more specific needs. These needs are directly related to the overarching problem and are relevant to most users. Needs were further split into what we call wants. Wants are the most specific issues and are what we provided suggestions for. Unlike the broader categories, each want may not be relevant to all users, but their specificity allows us to target solutions to them. Figure 4 shows the user journey progression we used, while figure 5 shows an example user journey. Note that the journey shown in figure 5 is heavily pared down for ease of viewability. The full user journeys were much larger, with many more specific needs, smaller wants and possible solutions.

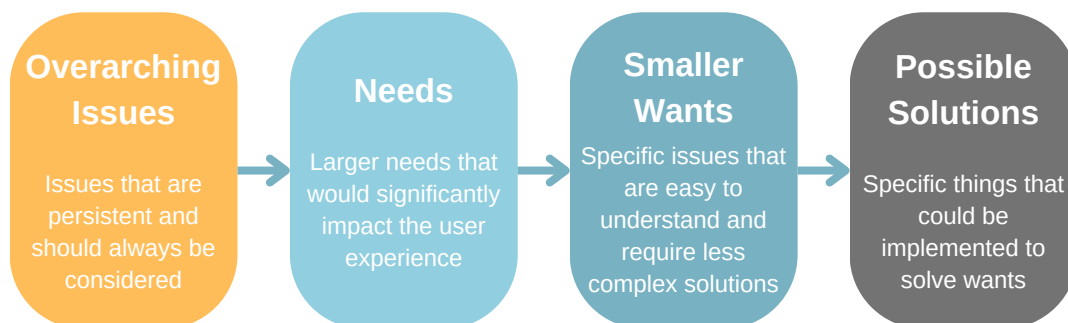


Figure 5: User Journey Overview

Suggested solutions were also sorted into categories made up of the larger feature our recommendations pertain to. These categories were Dashboard, Uploading Materials, Search and Activities Themselves. Through these categories, 100SB can focus directly on larger features and see the smaller details that make up our ideas. As each recommendation in these categories is also found in the User Journey Maps, 100SB can work backward and see why we made those recommendations in the first place. They can also learn more about different recommendations we have that may be in other categories but are relevant to multiple problems. Figure 6 shows an example of this solution group, in this case relating to our recommendation to create personal dashboards for each user.

Findings and Analysis

Competitor Findings

During our competitor research, we found many website aspects that were implemented well and many that would not work well for a teacher resource repository. We focused our research on websites that have educational resource repositories to see how they function. The following paragraphs contain our findings from each specific website we analyzed. Most competitor websites have a way to view and tag resources, save or bookmark lessons/activities, display featured/popular sections on the homepage, and a login to utilize the resources/lessons/activities.

ARTS:LIVE was created by The Song Room, an Australian-based not-for-profit organization that helps disadvantaged children build creativity with quality music and arts programs. It provides creative educational content for students, educators, and parents to facilitate exploration, learning, and development of creative skills. The website contains extensive lesson plans and interactive learning materials across various subject areas, including math, science, and literacy (ARTS:LIVE n.d.). This organization has a similar approach to 100 Story Building (100SB), utilizing creative ideas to engage students and teachers. When looking at Arts:Live, the website successfully conveys what each piece of content is about by using icons instead of words to indicate what resource it is, as seen in Figure 6. This style of tagging system with icons showcasing each resource would be an excellent fit for Digital Story Hubs because it simplifies the website with a tagging system that does not make the website feel cluttered. Also seen in Figure 6, the website has an outstanding way of previewing each resource before a user clicks on it, showing either a picture of the resource itself or a picture of the resource in action. When interviewing teachers, many mentioned that having a picture or a video of the resource in action, as seen with the first three courses in Figure 6, would make them more inclined to download and use the resource in their classroom. With the first three courses in Figure 6, a user can see pictures of the image in action. Once a user clicks on a resource, a user will be brought to the information page about the resources and a button to download the resource with a video that is front and center of the page that will show the resource in action and how to use the resource if a user logs into the website.

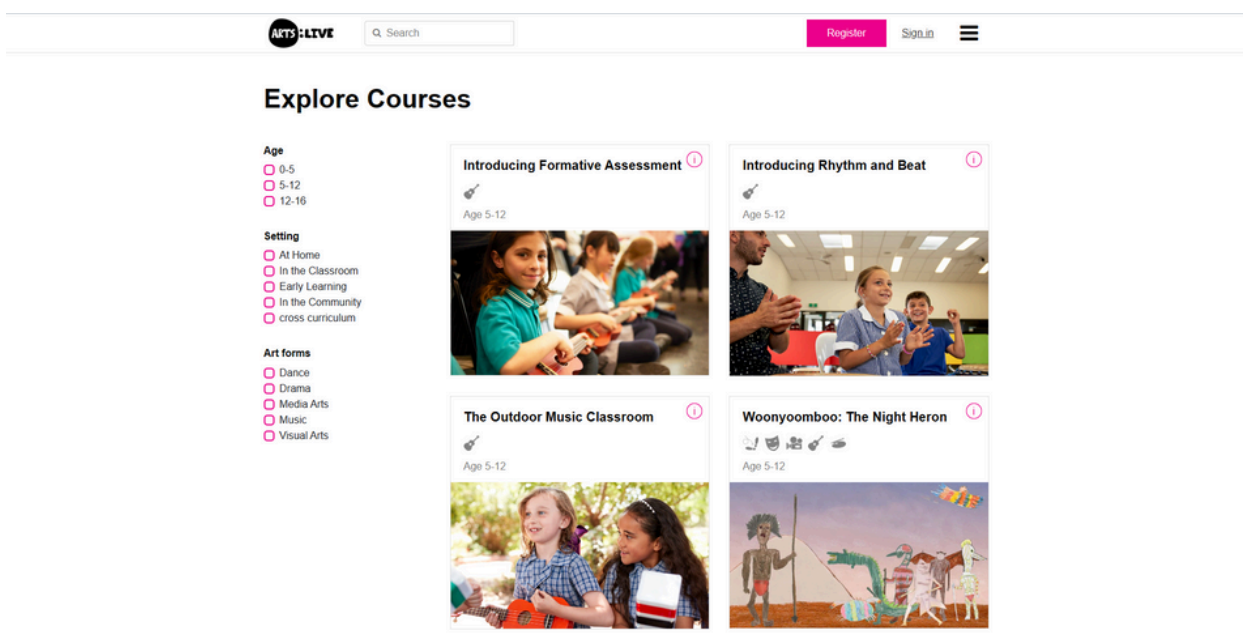


Figure 6: Screenshot of explore courses section of ARTS:LIVE (ARTS:LIVE, 2024)

Findings and Analysis

Like most other competitor websites, ARTS:LIVE has a new and featured section on its homepage that showcases an activity. This could be what the organization wants teachers to use because it could be a well-made activity or be popular among teachers. One negative feature of ARTS:LIVE is that the website looks sparse due to excessive white space, causing it to appear less engaging. ARTS:LIVE gets support from the Australian Department of Education to ensure each resource can work under the standardized curriculum. Even though 100SB is against the Australian Government's standardization, as seen in ARTS:LIVE, they would inevitably have to mention how their resources could work within the curriculum. Finally, the last ineffective feature of ARTS:LIVE is that there is nowhere to save or bookmark any resources that users may want to use in the future. This, in turn, will make the user more likely to forget about the resource or cause them to take more time out of their day for something that should have been easily accessible.

Another competitor website we looked at is Cool.org, formally Cool Australia. It is a curriculum-aligned teaching resource website that equips teachers to teach what matters and creates better outcomes (Cool.org, n.d.). This website was originally designed for teachers to teach students using engaging resources about critical environmental and social issues. Cool.org tries to help manage teachers' workload, save teachers time preparing lessons and activities for the classroom, and help students not drop out before their final year (Cool.org n.d.). We found that Cool.org had an effective tagging system, as seen in Figure 7. The tagging system will help users, especially teachers, find a resource based on subject, year level, topic, and availability.

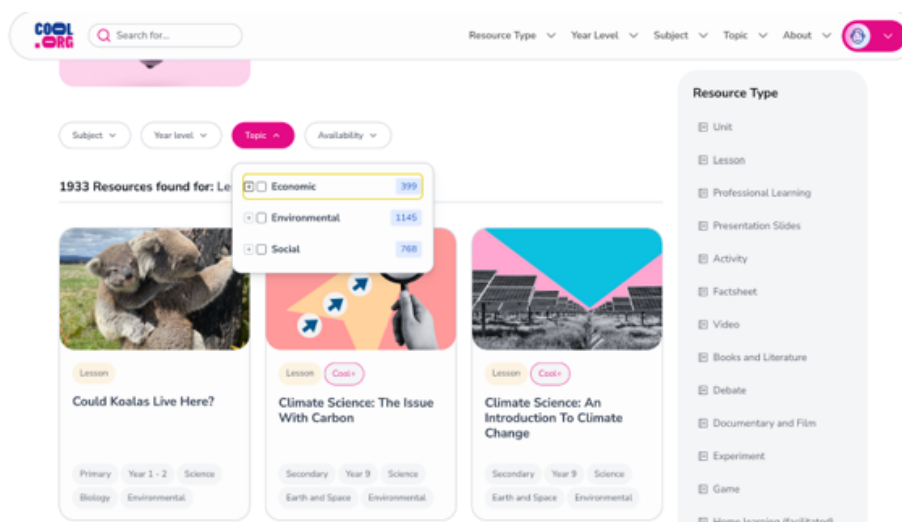


Figure 7: Screenshot of Cool.org tagging system (Cool.org, 2024)

Cool.org is one of the websites that most emulates our vision for Story Hubs Digital. Since we could get a login for this website, we could see the website as a teacher would. Cool.org would work best for the end users because of its great sorting and tagging

Findings and Analysis

system; it is simple since it sorts based on subject, year level, topic, and availability. The tagging system differentiates from ARTS:LIVE's tagging system in that when filtering the tags, they use dropdown menus, as seen in Figure 7, instead of listing out all the filters for the tagging system, which could overwhelm the users by showing too many choices. Unlike ARTS:Live, Cool.org does have a way to save or bookmark resources in a separate dashboard page for each user, as seen in Figure 8 in the saved resource section on the top right. Cool.org's dashboard even has a section on professional learning since it gives those types of resources to teachers to use for the mandatory professional learning hours they need. Like Cool.org, 100SB is trying to implement a professional learning aspect for teachers since that is integral to the Story Hubs Program. Even with the website having so many positives, there are still ways the website could have improved by having a way to show teachers how each resource, lesson, and activity works. One negative aspect of Cool.org is that there is no way to see how this resource works in action or the classroom, which teachers requested during our interviews. It would be helpful for teachers to see the true vision of how the resource works.

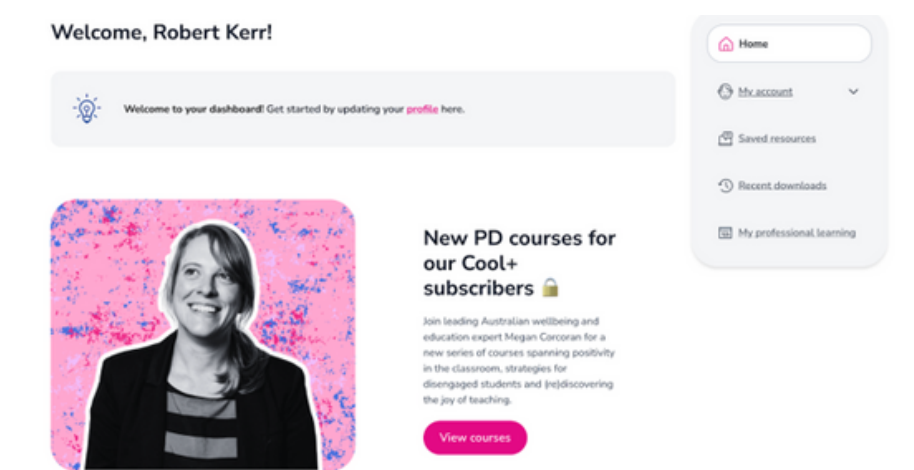


Figure 8: Screenshot of Cool.org dashboard page (Cool.org, 2024)

826 Digital is a website created by 826 National, a non-profit organization based in the United States of America that helps students ages 6 to 18 improve equity and increase access to resources to help with writing, which aims to make higher education possible for underserved students (826 National, n.d.). 100SB's goals are similar to those of 826 National in that they both try to bring creativity into the classroom through reading and writing activities in underdeveloped areas and to help improve teachers' and students' education, confidence, and creative skills. The 826 Digital website brings the 862 experience onto a digital platform with hundreds of writing resources for Primary and Secondary or K-12 students and teachers (826 National, n.d.). Since 862 National is a non-profit, 826 Digital is free for anyone, but people would need to sign up to use everything the website offers.

As seen in Figure 9, 826 Digital has a great way of relaying the type of activity a user is

Findings and Analysis

looking at with the colors they choose for each resource throughout the website. In Figure 9, the website tells the user that this color on the image corresponds to a resource with an explanation of what that type of resource is right below each image, with lessons being the yellow icon of a pencil and eraser. A user can tell what resources will display on the screen, like the background could be red when a user enters a page or a section for spark, quickly adaptable writing prompts, and activities. Also, when a user hovers over a resource, the color changes behind the text of the specified resource tagged, such as changing to light green for a video. Once the color starts to change when a user hovers, the text also changes to a summary of the resource, giving the user a sense of what the resource is about without having to click on the resource to get the same info. The summaries also save teachers from having to take the time to load each page of a resource they may not even use. The different shades of blue on the website can make the webpage complicated to read and messy since it has a sharp color transition to different sections.

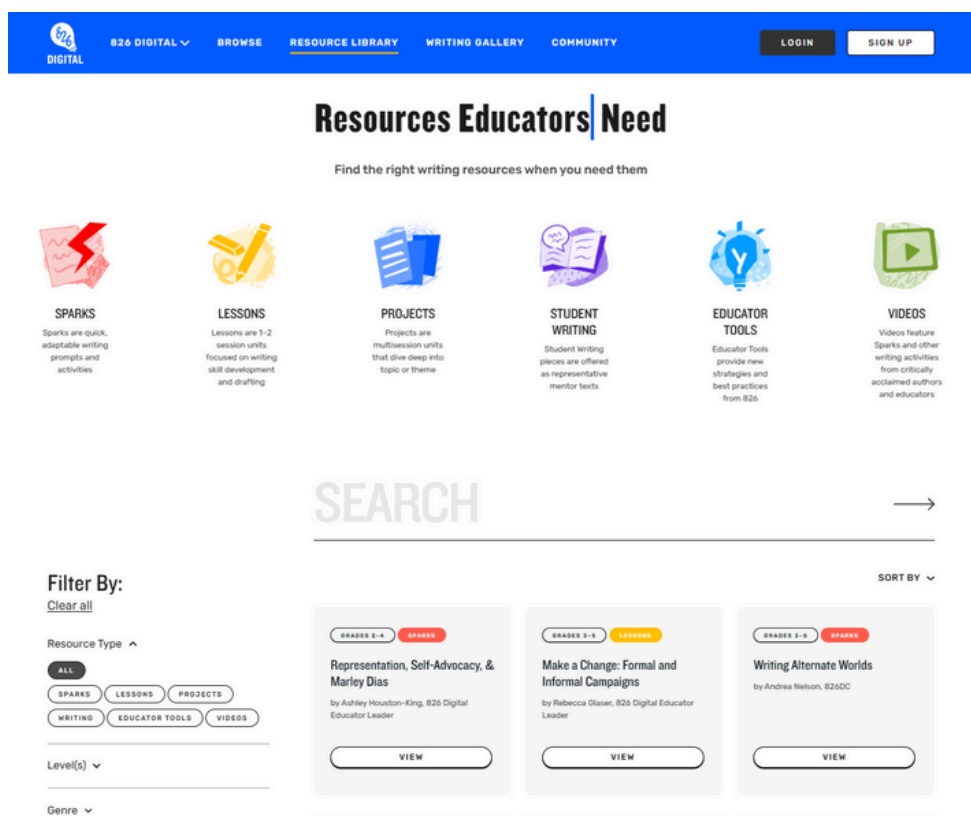


Figure 9: Screenshot of 826 Digital tagging and resource page (826 National, 2024)

Like most websites, 826 Digital has a homepage that displays popular and featured resources. However, this website decided to categorize the resources they wanted to feature, such as tools for educators and “Write Where You Are: Place-Based Writing” (826 National, n.d.). The categories, in turn, may overwhelm a teacher with too many choices, making it harder to plan what activities and lessons they want to plan for the week. It may help teachers get ideas for what resources to look for on the website while

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taking precious time away from doing their actual planning. 862 Digital has testimonials and infographics that show how their website has helped teachers in their classrooms, as seen in Figure 10. We are thinking of doing something similar for our website because it is a way we could increase website content and materials for 100SB. We would offer a testimonial from a teacher about how great uploading a resource to 100SB is. With 826Digital being the closest resource to what 100SB is trying to create, our website should take cues from the color coding with the tagging. It helps a user quickly find what they need by the color coding and tagging scheme. It will save them time. One downside of 826 Digital is that they do not have videos or pictures showing a particular resource in action, like ARTS:LIVE.



Figure 10: Screenshot of a 826 Digital Testimonial (826 National, 2024)

TeachersPayTeachers (TPT) is a website where teachers share innovative solutions. It is a marketplace for PreK-12 or Primary and Secondary with resources an educator could use to bring more creativity, better engage students, and level up their teaching skills (TeachersPayTeachers, n.d.). TPT is the only competitor website that charges a fee for each resource separately instead of offering a subscription or free service for the whole website. This website also incentivizes teachers to put their own resources on the website because they can add it to their offerings and charge other teachers for it. With 100SB being not-for-profit, this business model would not fit because they believe the resources should be free for teachers. This entry barrier may prevent schools and teachers from using the resource. When looking through TPT, this website felt more like a place to get resources to download and not a website to plan lessons for the week. On the other hand, this website has an excellent system for tagging since a user can pin down what specific resource a user wants, as seen in Figure 11. TPT’s tagging system has the most options to specify what resource a user wants from all the competitors.

Findings and Analysis

Formats

- Easel
- Google Apps
- PDF

Show all Formats >

Grades

- PreK
- K
- 1st
- 2nd
- 3rd
- 4th
- 5th
- 6th
- 7th
- 8th
- 9th
- 10th
- 11th
- 12th

Other

- Not Grade Specific
- Higher Education
- Adult Education
- Homeschool
- Staff

CCSS



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Wish List



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Created by The Candy Class

~~\$50.00~~

\$17.25

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Figure 11: Screenshot of TPT tagging and marketplace page. (TeachersPayTeachers, 2024)

From the competitors we looked at, the two websites that we did not really like are ACEReSearch and Learning and Teaching. ACEReSearch, from the Australian Council for Educational Research, is an online database or digital library that allows educators, researchers, and students to access educational research documents (ACER, n.d.). The types of educational research documents they have on the website include assessment and testing, curriculum development, education policy, and educational psychology. ACER claims that these resources help improve educational outcomes. ACEReSearch needs a cohesive homepage since it goes straight to the search for resources section. The text that a user sees when a user first opens the website is tiny and dense. Like many competitor websites, ACEReSearch has featured and popular resource sections on the website's homepage, as seen in Figure 12. Still, users must click on them to see which resource they are on via a separate page. This website has a lackluster tagging and filtering system compared to competitors' websites when searching for resources. ACEReSearch has limited filter options, only being able to filter based on abstract, author, subject, institution, title, document type, and publication. The one upside to this website is that a user does not need a login or even a subscription service to view and download every resource the website has to offer.

ACEReSearch
Repository of research-based knowledge to improve learning

ACER
Australian Council for Educational Research

Search repository

Enter search terms:

in this repository

Advanced Search

Notify me via email or [RSS](#)

Browse repository links

- All authors
- All publications
- ACER researchers profiles
- Research Conference
- Journals and newsletters

Related links

- ACER website
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Areas of Research

- ACER researchers profiles
- Assessment and reporting research
- Early childhood education research
- Education and development research
- Higher education research
- Indigenous education research
- National and international surveys
- School education research
- Vocational, adult and workplace education research

At a Glance

- Top 10 Downloads
- All time
- Recent Additions
- 110 most recent additions
- Activity by year

Paper of the Day

Learning Through Play at School: Ukraine, 2019-2024
Rachel Parker, Amy Berry, et al.





Literature Review
Schools as community hubs

Figure 12: Screenshot of ACEReSearch homepage. (ACER, 2024)

Findings and Analysis

Finally, when looking at Learning and Teaching, this website does not have any homepage from the Australian Government's Department of Education. It just shows a search bar with one sentence below explaining what this website is for. At least it has an area below the search bar where users can click on new and featured resources that the website wants to highlight. The website is more geared towards higher education, like university level, instead of focusing on Primary and Secondary education with a focus on education research. This website does a great job listing the resources for research purposes by telling you the authors' publication date, as seen in Figure 13. However, more than that would be needed for a teacher repository since there is no way to tag or sort resources by subject. Having a filtering and training system is the most important because teachers would first look for resources based on the subject they are teaching or will be teaching for planning purposes.

The screenshot displays a search results page for 'Learning and Teaching'. At the top, it indicates 'Showing 1 - 20 results of 1,331 for search ', query time: 0.05s'. A 'Sort' dropdown menu is set to 'Date Descending'. The main content area lists four search results, each with a logo, title, author information, publication date, and a DOI link. The results are:

- 1**  **The 4 Cs Strategy for disseminating innovations in university teaching : Classroom, Corridors, Campus, Community.**
by Gribble, Lynn, Beckmann, Elizabeth A.
Published 2023
<https://doi.org/10.53761/1.20.01.03>
- 2**  **Benchmarking Australian Enabling Programs for a National Framework of Standards.**
by Davis, Charmaine, Cook, Chris, Syme, Suzi, Demoster, Sarah, Duffy, Lisa, Hattam, Sarah, Lambrinidis, George, Lawson, Kathy, Levy, Stuart
Published 2023
<https://doi.org/10.5204/ssj.2841>
- 3**  **The Block : A catalyst for ongoing innovation.**
by Konjarski, Loretta, Weldon, John, Ashley, Susan, Freeman, Traci, Shanata, Jai, Yamanishi, Meghan, Lotz, Erin, Gilde, Christian, Ganzel, Alice
Published 2023
<https://doi.org/10.53761/1.20.4.13>
- 4**  **Calling out Racism in University Classrooms : The Ongoing Need for Indigenisation of the Curriculum to Support Indigenous Student Completion Rates.**
by Fredericks, Bronwyn, Barney, Katelyn, Bunda, Tracey, Hausia, Kirsten, Martin, Anne, Elston, Jacinta, Bernardino, Brenna
Published 2023
<https://doi.org/10.5204/ssj.2874>

On the right side, there is a 'Narrow Search' sidebar with two sections: 'Institution' and 'Author'. The 'Institution' section lists: University of Queensland (168), Queensland University of Technology (127), Curtin University (126), University of Sydney (118), and Griffith University (104). The 'Author' section lists: Kinash, Shelley (30), Judd, Madelaine-Marie (25), Crane, Linda (18), Dowling, David (17), and Chalmers, Denise (16).

Figure 13: Screenshot of Learning and Teaching resource page (Learning and Teaching, 2024)

With all the websites we looked at, we saw how each website implemented their tagging and filtering systems differently, managed their homepages, and presented the way to find resources. Our findings show that websites would either have a dropdown menu or a checkmark system to filter the tagging system for each resource displayed based on your filter and search results. Each website's homepage displayed a new featured section or a popular and curated section highlighting specific resources or materials. Some websites showed each resource better than others. ARTS:LIVE did the best job showcasing resources, while ACEReSearch was the worst at showcasing resources, as seen in Figure 14.

Competitor Website Comparison Chart

Features	Cool.org	TPT	826 Digital	ARTS:LIVE	ACEReSearch	Learning and Teaching
Homepage	✓	✓	✓	✓	✓	✗
New and Featured sections	✓	✗	✓	✓	✓	✓
Tagging System	✓	✓	✓	✓	✓	✓
Filtering system for tagging	✓	✓	✓	✓	✓	✗
User Friendly	✓	✓	✓	✓	✗	✗
Resources Include Images or Videos	✓	✓	✗	✓	✗	✗
Bookmark and save resorces	✓	✓	✓	✗	✗	✗
Strong Search tool	✓	✓	✓	✓	✗	✗
Engaging Design	✓	✗	✓	✓	✗	✗
Free or Subscription	Parts Free, Parts Require Subscription	Pay Per Resource	Free with Login	Free with login	Free	Free

Figure 14: Competitor Website Comparison Chart

Teacher Interview Findings

Teachers are the key to our entire project; they are the main group we interviewed and the target of our recommendations. It is thus crucial for us to gain as much as we can from every moment spent with them and incorporate every piece of information possible into our suggestions. From what we experienced teachers do not fit under one common mindset, but have a wide variety of thoughts. This meant that sometimes their ideas were very different, but rarely were they mutually exclusive.

By far the most common thing discussed in teacher interviews was their lack of time. Both directly and indirectly we were told that they did not have enough time as it is, and were looking for alleviation, not additional time burdens. Finding new activities to implement in their classrooms, experimenting with and customizing materials to better suit their needs, and designing new activities were all talking points that were met with concerns about the possible time investment. When discussing different means of sharing activities, teachers made it clear that they wanted to be able to access the activities quickly and easily. They did not want friction when accessing the site or searching for an activity. This included logging in and accessing the website, as they mentioned annoyances with how long it can take and how it both disengaged them and made them feel less likely to return to the website in the future. Another important feature was searching; they wanted to find an activity that matched their needs as quickly as possible and not need to turn to a variety of resources and scroll endlessly through unrelated material to find what they knew they wanted.

Another frequently discussed desire is a dedicated place to view activities they deem more important. Alongside this were suggestions on having access to a system that would allow them to like or save an activity. This often led to the idea of a feedback feature, allowing those who created the material to see how their work has impacted other teachers, and that this positive feedback would make them feel more inclined to develop additional activities with 100SB in the future.

One point of disagreement between teachers was how they would like to primarily access the website. At first, one teacher talked about scrolling through Instagram being their favorite way to find resources, and therefore they'd like a similar feeling with a mobile website. However, another teacher was much more in favor of a primarily desktop-focused site, where they could access it from their laptop. Finally, a third teacher was more keen to work with their tablet, as it was the device most accessible to them while in the classroom. When looking at these requests, every teacher was asking for different delivery methods,

Findings and Analysis

but not in content. Teachers want something convenient for them to use, with a minimal learning curve, as the lack of available time in their day that was discussed earlier prevents them from wanting to invest in a new site without guaranteeing a payoff, and making the website only accessible on a device other than the one they are used to would add another step to their work.

While the teachers were very forthcoming about their needs and limitations, there were also things we learned that the teachers did not directly tell us. One major concern with many of these teachers was their lack of self-confidence when it comes to creative ability. Their request for ready-made activities, while partially motivated by their time constraints, was also a result of their belief that it was 100SB staff's job to be creative, so therefore the staff was simply better at creative work. During interactions with the staff of 100SB, the teachers talked about how their confidence in making activities and engaging with the Story Hubs had improved over the two years they had been involved with the program. This sentiment was echoed by staff, who said that even the more outspoken teachers during their meetings had been significantly less forthcoming in the beginning of the Story Hubs program. We saw that teachers who were most excited to participate in workshops with the 100SB staff also tended to be the most confident with contributing their ideas during interviews. The more experience teachers have with 100SB, the more willing they are to incorporate the organization's ideas of creative expression into their own work. Continuing this learning experience on a website is the key to making Story Hubs Digital truly feel like a part of 100 Story Building's work.

Staff Interview Findings

The other interview group was the staff members of 100SB, including managers, the program coordinator, and program facilitators. Although the staff are not the primary target audience of the Story Hubs Digital platform, they will play an incredible role in the initial content created and provided to the platform. At the start of the website's operation, teachers are not expected to provide any activities to the platform, which means the content that populates the website at launch will be entirely created by the 100SB team. Materials created by staff that fit well with the needs of Story Hubs Digital will make up the 100SB produced content and new activities created by 100SB specifically for the website.

The staff involved with the making of Story Hubs Digital expressed other opinions on what they hoped to see in the future website. The facilitators, who run student-facing workshops, after school programs, and professional learning sessions for teachers, were

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largely focused on the simplicity of uploading and creating content. They are the staff most frequently interacting with the teachers of Story Hubs face-to-face, and understand common teachers' wants and concerns, so all of their opinions regarding website use centered heavily on what they know about the teachers they talk with. Lack of time among the teachers was a concern, which overlapped with the facilitators' need to access material spontaneously during workshops and teacher consultations. Because of this, the facilitators often brought up the desire for consistent visuals to help convey information quickly, along with a clear sorting system for material so that users with a clear vision can get what they are looking for as fast as possible. Convenience was also important to them, often overlapping with time-saving ideas, as a website that is convenient to use is usually quick and approachable. Therefore, facilitators believed that being able to access a resource in multiple ways, including having options of file types to download, would make the website far simpler to use, as changing device type or editing program would be possible without any file conversion on the user's end.

Findings and Analysis

Overarching Issue	Specific Needs	Smaller Wants	Possible Solutions
<p>As a teacher I am very time limited</p>	<p>I need to easily pickup where I left off</p>	1 I want to be able to access resources without going online	Implement the ability to download resources
		2 I want to easily find the last resource I accessed	Implement a history tab to the dashboard Add a last opened shortcut to the home screen
		3 I want to be able to access the same resource on multiple devices	Implement a way to keep information across multiple devices
		4 I want to keep track of desired resources	Implement a favorite or save option which saves to the user's dashboard
	<p>I need to be able to quickly find a resource I'm searching for</p>	1 I want a simple way to understand a lesson at a glance	Implement visual search results that include important information Add a short or succinct description to each activity
		2 I want to add search terms that are relevant to my needs	Implement typical search with search operators
		3 I want a way to filter search results	Implementing a tag based search system Implementing a like/dislike based search algorithm
	<p>I need to have a frictionless experience when opening the website</p>	1 I want to not have a tedious initial experience	Create a simple initial account creation Create a short tutorial or none at all
		2 I want a simple and quick way to login	Implement 3rd party logins for accounts (google, microsoft...) Implement a quick username & password login system
	<p>I need to be able to take advantage of free time no matter the environment</p>	1 I want to be able to access resources in areas without a workspace	Create resources that do not require anything more than the page to understand Implement a way for all information to be accessible directly from the site
		2 I want to be able to access resources on a variety of device types	Implement a user experience that is consistent across all devices

Figure 15: Teachers' Time User Journeys

Findings and Analysis

To ease teachers into creating their resources up to the standard of 100SB material, the facilitators discussed the idea of using their current professional learning (PL) workshops. During PL sessions, they could spend a portion of time working with an existing activity that the teachers created and want to share, where the facilitators then talk about any changes they would make and why, and truly help their work capture the feeling of Story Hubs. This would be intended to help build the confidence of teachers in their creative abilities, as they would be able to hear directly from the 100SB staff who they regard as the creatives in the collaboration. This means when they're working on materials in the future and wish to submit them to Story Hubs Digital, they'll know the type of notes 100SB might have ahead of time, and be able to independently meet the organization's expectations.

The program managers, specifically our main point of contact, Jessica Tran, had more to say on how 100SB would be expected to run the website. One of the main requirements is that there should be minimal day-to-day moderation required by the staff of 100SB. This means that there cannot be any form of messaging or commenting on the platform, and any feedback that can be given should be without involvement by 100SB at any point. Moderation would require additional work from the 100SB staff for a potential feature that was not a priority, and thus was not something that needed to be included. It was also important that the material on Story Hubs Digital was valuable, and not overflowing with every resource the group had or any activity someone wanted to upload regardless of quality. Too much material can be overwhelming, and duplicate activities would certainly occur, bloating the website even further. Instead, being selective with 100SB content, and allowing teachers to submit material for review before it is published, would allow for collaboration between the teacher and 100SB to develop a submission that fits within the Story Hubs program. However, this time investment from the 100SB differs from their concern around moderation, as it is time that goes toward one of the website's priorities, filling the website with suitable teacher created work.

The goal of Story Hubs Digital as discussed in these interviews is not to be a copy of previously mentioned educational resources, such as Cool.org or teacherspayteachers.com. Rather, Story Hubs Digital is intended to be a repository of curated resources that align closely with the current Story Hubs program. Although this was not necessarily within the scope of our project, the design and feel of the website were commonly brought up. The consensus seemed to be that 100SB wanted to balance professionalism with a more childish and fun side, a feeling that should permeate every aspect of the platform, staying true to the Story Hubs program.

Recommendations

Recommendations

Throughout this project, recommendations have been coming from almost all sources. Whether the ideas come from teachers, staff, research, or even ourselves, our thoughts have been constantly reshaped. The way we viewed one feature or aspect of the website could change from day to day. These changing aspects lead the team to believe that there is no one perfect website, but that there are many different effective versions and it is important to remember that what is best for one user and their information may not be the best for someone else. Through our findings, we believe that we can see what is wanted from the perspective of many rather than few, allowing us to make recommendations tailored to an experience that helps the majority rather than the vocal.


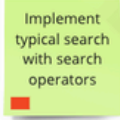


Search	
We recommend that the search utilizes tagging. We also recommend it operates as a normal search would.	
Relevant Stickies	Additional Information
 <p>Implementing a tag based search system</p>	<p>We found tagging to be the most effective way of narrowing search results. We would recommend utilizing a word cloud as that seemed to be the most liked thing from the teachers we surveyed, but drop downs were liked by some.</p> <p>For the tags themselves, some categories that came up were, subject (history, math...), time length, type of activity, age range, and resource type. There are many possible other categories and we feel that working backwards could be an effective way of finding them. When creating an activity adding as many relevant tags as possible could be helpful and if tags across multiple activities fall under one category it may then be worth adding that category to the search.</p> <p>As for the specific options under each category, we feel you shouldn't go about planning them but rather adding them to the list as activities are added that match the option.</p>
 <p>Implement typical search with search operators</p>	<p>This would include a typical keyword or title search. We also feel it may be beneficial to add search operators (AND, OR, -) but is not important and most likely would rarely if at all be used.</p>
 <p>Implement a visual search result that includes important information</p>	<p>We feel that the results should include an image that gives the user an idea of what the activity is about. The results should also include a title and possible some tags to give some more information about the activity before the user clicks on it. Teachers wanted to easily gain as much as possible from a simple search results page.</p>
 <p>Add a button to the search for a random activity</p>	<p>This could just go directly to a random activity or pull up a list of random activities. Teachers want to explore and find new things that they may not have searched for otherwise.</p>

Figure 16: Search Feature Recommendations

Recommendations

One of the most important parts of the website is the ability to search. If not implemented properly this can lead to results that don't represent what the user hoped for. Hearing from both teachers and through our experience, having a tagging feature allowing for more nuanced searches is an effective way to filter resources to match the user's needs. We have seen this commonly on other platforms in two different formats. The first is a tagging system composed of categories with checkboxes that allow the user to pick the best options in each category. The system is one of a few drop-downs, where you can choose one of the options and save that as a tag for your search. Either one of these options would be an effective way to enhance search from a basic search bar when creating Story Hubs Digital.

A possible feature that was brought up and solves a multitude of problems related to the organization of a user's data is a dashboard. A dashboard could be the place where a user finds all the information relevant to them. This would include saved or favorited activities so that they become easily accessible. It could also have a recently accessed activities area to reduce the friction of finding a previously accessed lesson. Finally, information about produced activities could be easily accessed here giving teachers easy access to the impacts of their work.

Some people don't know exactly what they are looking for when they open Story Hubs Digital; they need to explore. One way we thought about going about this is by including a highlighted activity on the home page. 100SB could choose this activity through any metric and could showcase an activity that teachers may not have looked for or stumbled upon normally. Not only does a feature like this help users who are searching for activities, but it could also be used as an incentive for teachers to share some of their activities. Perhaps a "creator of the week" can help inspire teachers to share something of their own to gain similar recognition.

Although the format of the lessons may be beyond the scope of this project, the teachers we interviewed had a lot of input on how they could look. Due to the variety of different formats that the teachers requested, it may be best to veer away from a linear plan that is followed by every activity. Some teachers preferred videos, others text, more diagrams, or a mix of multiple formats and genres. The most common request was a video of the activity in action. This would not be simple due to needing access and permission to run and to record the activity in front of a group of kids but if that is not possible it may be possible to produce video materials differently. Not only do the tools used in teaching the activity matter, but the specific resources are important as well. Teachers mentioned wanting to be able to easily edit and change the activity to mold it into something that better represents themselves. For this, we recommend having some downloads that are easily editable so that teachers can not only access the resources remotely but also have the opportunity to easily change them.

For Story Hubs Digital to grow and become self-sustainable, teachers need to be able to create their own resources. As mentioned before, the greatest setback for teachers is the limited time they have in their day. This makes it hard to get teachers to sacrifice some of their time to upload their material to the website without any tangible reward. This is why the process of uploading material must be as easy as possible. We recommend giving teachers options on how they want to work with 100SB to turn their work into something that others can use on Story Hubs Digital. This could include utilizing a form for the simple upload of materials and explanations, a built-in page that helps construct a submission to 100SB, or an email address. There is no one right solution but having options helps tailor the experience to more teacher's needs.

References

References

- 826 National. (n.d.). Browse Free Writing Prompts. 826 Digital. Retrieved April 22, 2024, from <https://826digital.com/>
- ACER. (n.d.). ACER Research Repository. Retrieved April 22, 2024, from <https://research.acer.edu.au/>
- ARTS:LIVE (n.d.). ARTS:LIVE Homepage. ARTS:LIVE. Retrieved April 22, 2024, from <https://www.artslive.com/>
- Australian Bureau of Statistics. "Socioeconomic Factors and Student Achievement in Queensland." Australian Bureau of Statistics, 2014, [www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4261.3Main Features32011](http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4261.3Main%20Features32011).
- Australian Government, & Department of Education. (n.d.). *Search Home*. Retrieved April 22, 2024, from <https://ltr.edu.au/vufind/>
- Australian Institute of Health and Welfare. (2022). Australia's children. Retrieved from <https://www.aihw.gov.au/reports/children-youth/australias-children>
- Australian Teacher Workforce Data: National Teacher Workforce Characteristics Report December 2021 (the ATWD Teacher Workforce Report). https://www.aitsl.edu.au/docs/default-source/atwd/national-teacher-workforce-char-report.pdf?sfvrsn=9b7fa03c_4
- Clare, J. (2022). Teacher Workforce Shortages. Australian Department of Education. <https://ministers.education.gov.au/sites/default/files/documents/Teacher%20Workforce%20Shortages%20-%20Issues%20paper.pdf>
- Cool.org. (n.d.). Home. Retrieved April 10, 2024, from <https://cool.org>
- OECD (2023), PISA 2022 Results (Volume I): The State of Learning and Equity in Education, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/53f23881-en>.
- Summary Statistics for Victorian Schools 2023. (2023). <https://www.education.vic.gov.au/Documents/about/department/brochure-2023-july.pdf>
- Thomson, S. (2021). *Improving a country's education: PISA 2018 results in 10 countries* (p.263). Springer Nature.
- TeachersPayTeachers. (n.d.). Teaching Resources & Lesson Plans | TPT. Retrieved April 22, 2024, from <https://www.teacherspayteachers.com/>

Appendices

Appendix A: Interview Questions

1. What is your previous experience, if any, with the Story Hubs program?
2. What components of the Story Hubs program are most important to you?
3. What elements from the Story Hubs program would you feature most prominently in a digital space?
4. Have you ever used other resources from 100 Story Building? Do you still use these resources or elements that you have learned from them?
5. Are there resources outside of 100 Story Building that you use to support your work?
6. Which educational resources do you use most frequently?
7. What do you like most about the resources you use currently, or have used in the past? What do you dislike about these resources?
8. Is there anything from external resources that you would like to see incorporated into Story Hubs Digital?
9. Are there any resources you have not yet discussed that would make Story Hub-based learning more engaging and effective for you?
10. How familiar are you with using digital resources?
11. Would you prefer Story Hubs Digital be supplemental to the Story Hubs program, or incorporated directly into the function of the program?
12. Would you be interested in a collaborative digital space that allows teachers to share resources they have used in Story Hubs?
13. If so, would you be interested in providing resources to others, using provided resources, or both?

Appendix B: Staff Questions

1. What is your understanding of what Story Hubs Digital will be?
2. What do you hope to be incorporated into Story Hubs Digital or what do you believe would be effective features to have?
3. What are some digital tools that you use or have seen used for developing activities?
4. What features would make uploading content to share easiest for you?
5. If you were a teacher, what features do you believe would be most effective at bringing you back to the website?
6. Are there any resources you have not yet discussed that would make Story Hub-based learning more engaging and effective for you?
7. Hypothetically, what/how do you see Story Hubs Digital being/being used in a couple of years?

Appendix C: Project Description

Who we are:

100 Story Building is a not-for-profit social enterprise and a creative space for young writers in Melbourne's West. We use storytelling as a tool to foster imagination and creativity in children and young people aged 6 - 18, and our impact is focused on those with a lived experience of disadvantage or other barriers to education.

We provide opportunities for these young people in our community to build the literacy skills, confidence and sense of belonging that are fundamental to future success. Since 2013, we have worked with more than 45,000 participants to expand their imaginations, amplify their voices, and become the hero of their own stories. Our vision is to promote equity in education and life opportunities. The gap between engaged, supported and successful students and those left behind is wider than it's ever been.

An under-resourced public education system leaves many young people behind, and this gap is largest between young people of different equity groups. Working in partnership with schools and communities across Melbourne's western suburbs and Geelong, we meet this urgent need through inclusive programming proven to re-engage young people and deliver increased confidence, creative skills and social well-being.

Our opportunity:

100 Story Building has developed, piloted and rolled out an innovative embedded creative literacy program in schools, called Story Hubs. Story Hubs is an educational program run in schools around Victoria that aims to foster creativity and literacy for children and young people through the co-design of creative spaces, art-based professional learning for teachers, and peer-to-peer collaborative networks.

Since 2019 The Story Hubs program has been developed, tested, iterated and refined by 100 Story Building and our partner schools. Recent evaluations indicate that the Story Hubs are meeting and exceeding ambitions for impact.

The next key stage in the Story Hubs roll out is Story Hubs Digital - an online space that captures and extends the learnings of Story Hubs for teachers and educational professionals. Story Hubs Digital is a space to share resources and reflections from teachers who have experienced the Story Hubs program, as well as materials authored by the 100 Story Building team.

Story Hubs Digital is developing along three paths, as outlined below. We'd like to engage the WPI group to work on several of the Audience Development and Digital Experience Development tasks outlined below:

Appendices

	Content Development	Audience Development	Digital Experience Development
December 2023 - February 2024	<p>100SB identifying content and content gaps</p> <p>100SB editing, revising and reframing existing content</p>	<p>Outreach to contributor teachers</p> <p>Early Access sign up live</p> <p>Research target audience and develop profiles</p> <p>Develop user personas</p>	<p>Engage designer/developer</p> <p>Specify platform</p>
March 2024 - May 2024	<p>Develop content around high impact teaching strategies and curriculum</p> <p>Finalize launch content and forward planning for content</p>	<p>Develop supporting marketing collateral to launch</p>	<p>Develop user journeys</p> <p>Work with designer/developer to finalize designs</p> <p>Test and optimize hub</p>

Suggested preparatory tasks:

1. Review the Year 1 Story Hubs evaluation report;
2. Research, review and share literature relating to the resourcing needs of primary and secondary teachers in Victoria, specifically west Melbourne and regional Victoria;
3. Research and review various user journey methodologies. Note that we will be employing a User Persona method.
 - <https://blog.hubspot.com/service/customer-journey-map#whats-included>
 - <https://webflow.com/blog/user-journey>

Deliverables:

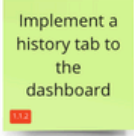
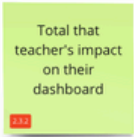


1. Audience profiles for users of the Digital Story Hub, based on user personas developed by 100SB and validated by research;
2. A set of user journeys describing various touchpoints with the Story Hub program and 100 Story Building, possibly in the form of a lo-fi prototype or story board;
3. A suite of promotional resources to engage the audience with the launch of Story Hubs Digital, including regular newsletters featuring new content and a list of partners to approach for cross promotion;
4. Recommendations for future content development and optimisation;
5. Recommendations for future enhancements to the website.


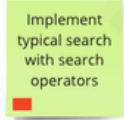


A summary presentation of findings and recommendations will be via a report and a presentation.

Appendix D: User Journey Maps

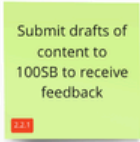
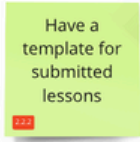

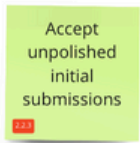
Overarching Issue	Specific Needs	Smaller Wants	Possible Solutions
<p>As a teacher I am very time limited</p>	<p>I need to easily pickup where I left off</p>	1	<p>I want to be able to access resources without going online</p> <p>Implement the ability to download resources</p>
		2	<p>I want to easily find the last resource I accessed</p> <p>Implement a history tab to the dashboard</p> <p>Add a last opened shortcut to the home screen</p>
		3	<p>I want to be able to access the same resource on multiple devices</p> <p>Implement a way to keep information across multiple devices</p>
		4	<p>I want to keep track of desired resources</p> <p>Implement a favorite or save option which saves to the user's dashboard</p>
	<p>I need to be able to quickly find a resource I'm searching for</p>	1	<p>I want a simple way to understand a lesson at a glance</p> <p>Implement visual search results that include important information</p> <p>Add a short or succinct description to each activity</p>
		2	<p>I want to add search terms that are relevant to my needs</p> <p>Implement typical search with search operators</p>
		3	<p>I want a way to filter search results</p> <p>Implementing a tag based search system</p> <p>Implementing a like/dislike based search algorithm</p>
	<p>I need to have a frictionless experience when opening the website</p>	1	<p>I want to not have a tedious initial experience</p> <p>Create a simple initial account creation</p> <p>Create a short tutorial or none at all</p>
		2	<p>I want a simple and quick way to login</p> <p>Implement 3rd party logins for accounts (google, microsoft, ...)</p> <p>Implement a quick username & password login system</p>
	<p>I need to be able to take advantage of free time no matter the environment</p>	1	<p>I want to be able to access resources in areas without a workspace</p> <p>Create resources that do not require anything more than the page to understand</p> <p>Implement a way for all information to be accessible directly from the site</p>
		2	<p>I want to be able to access resources on a variety of device types</p> <p>Implement a user experience that is consistent across all devices</p>

Appendix E: Recommendation Categories

Dashboard	
<p>We recommend the dashboard be the central place that a user finds all personal information. This would be things specific to that user. It would be the default place for a user to look if there goal isn't to immediately search.</p>	
Relevant Stickies	Additional Information
	<p>Could be found as a button on the dashboard which redirects to a specific history page. It could also be a list of the most recently viewed activities with the opportunity to expand the list. Teachers want this so the can easily pick off where they left off or return to an activity they had recently seen.</p>
 	<p>Teachers want to know their total and individual "likes" or whatever is decided so that they can feel good about the work they've put in. They also would like to know the number of people impacted by their work and see numbers to put into perspective how they've impacted students.</p>
	<p>Teachers wanted to make sure they didn't lose what they had been looking at and also wanted a way to keep track of their favorite activities. Having a simple save button that allows a teacher to quickly access an activity from their dashboard would be beneficial.</p>

Search	
We recommend that the search utilizes tagging. We also recommend it operates as a normal search would.	
Relevant Stickies	Additional Information
 <p>Implementing a tag based search system</p>	<p>We found tagging to be the most effective way of narrowing search results. We would recommend utilizing a word cloud as that seemed to be the most liked thing from the teachers we surveyed, but drop downs were liked by some.</p> <p>For the tags themselves, some categories that came up were, subject (history, math...), time length, type of activity, age range, and resource type. There are many possible other categories and we feel that working backwards could be an effective way of finding them. When creating an activity adding as many relevant tags as possible could be helpful and if tags across multiple activities fall under one category it may then be worth adding that category to the search.</p> <p>As for the specific options under each category, we feel you shouldn't go about planning them but rather adding them to the list as activities are added that match the option.</p>
 <p>Implement typical search with search operators</p>	<p>This would include a typical keyword or title search. We also feel it may be beneficial to add search operators (AND, OR, -) but is not important and most likely would rarely if at all be used.</p>
 <p>Implement a visual search result that includes important information</p>	<p>We feel that the results should include an image that gives the user an idea of what the activity is about. The results should also include a title and possible some tags to give some more information about the activity before the user clicks on it. Teachers wanted to easily gain as much as possible from a simple search results page.</p>
 <p>Add a button to the search for a random activity</p>	<p>This could just go directly to a random activity or pull up a list of random activities. Teachers want to explore and find new things that they may not have searched for otherwise.</p>

Activities Themselves	
Here we provide some additional information on what we have learned that teachers are looking for in the activities themselves.	
Relevant Stickies	Additional Information
<p>Create resources that do not require anything more than the page to understand</p> 	Teachers mentioned not wanting to look at a bunch of different documents or webpages to understand an activity but would have everything in one place so we recommend having all the information on the activity's page.
<p>Add a short or succinct description to each activity</p> 	We recommend adding a short explanation of the activity at the top of its page as teachers requested this to be able to quickly get a more in depth understanding of the activity before devoting too much time.
<p>Implement the ability to download resources</p> 	We recommend having everything downloadable as teachers wanted to be able to edit the activities. Some also wanted to be able to access everything offline or in a different format than a webpage.
<p>Provide examples of the activity in action</p> 	One of the most common things teachers said is that they would like to see a video or some other means of the activity actually taking place. If videos are not possible we would recommend giving an example of a product of the activity, for example if doing a zine activity may be share a few examples of zines.
<p>Provide information on how the activity impacted students</p> 	Teachers want to know the outcome of the activity before it happens. This is not entirely possible so we would instead recommend adding parts a section about experience with the activity.
<p>Provide activities through different means</p> 	Teachers much like students learn best using different methods. Some teachers preferred videos, text or diagrams. We would recommend providing a variety of different ways a teacher can learn about an activity to accommodate as many as possible.

Uploading materials	
Information on the process of submitting materials to 100SB to be formed into an activity.	
Relevant Stickies	Additional Information
 <p>Submit drafts of content to 100SB to receive feedback</p>	<p>We recommend having a feedback process as teachers want to learn more where they can improve and some want to play a role in the development process of their submission.</p>
 <p>Have a template for submitted lessons</p>	<p>Some want to know what a submission so that they can organize their activities. We believe this would be most effective as a webpage or an example document.</p>
 <p>Allow the submission of a variety of resource formats</p>	<p>Teachers don't want to need to change the format of the activities they have already made. They want to continue using the same format as they had been using, some mentioned pdfs, or google products.</p> <p>Along with this teachers want to be able to submit their stuff in different ways. Some that were mentioned were email, google forms or within the website itself.</p>
 <p>Accept unpolished initial submissions</p>	<p>Some teachers didn't want to need to take the time to reformat their work from what works best for them. These teachers would prefer sending what they have and having 100SB reformat and get back to them.</p>

Other Important Features	
Relevant Stickies	Additional Information
<p>Implement a user experience that is consistent across all devices</p> 	<p>We recommend that between different device types that the experience remains about the same as learning new interfaces creates friction and could turn teachers away.</p>
<p>Implement 3rd party logins for accounts (google, microsoft...)</p>  <p>Create a simple initial account creation</p> 	<p>Teachers often mentioned the importance of a easy initial login and setup. One recommendation we have is give teachers the opportunity to login using other services such as Google or Microsoft. Otherwise a simple email and password login would be best.</p>
<p>Allow only positive reactions to activities</p> 	<p>Teachers don't want criticism nor do you want to moderate any sort of criticism but teachers do want positive feedback. We would recommend a simple feedback system such as likes or heats that allows teachers to see that their activities are appreciated.</p>
<p>Give teachers the opportunity to share their contact information if wanted</p> 	<p>Some teachers mentioned they wouldn't mind being reached out to if any teachers had questions about their activities. We feel that allowing teachers to decide if they want to share their contact information could be beneficial.</p>
<p>Create a section on the homepage with featured activities</p> 	<p>We feel that adding featured activities could help teachers who want to discover something new. It could also help show support for teachers who created the resources and got their activity featured. We recommend this either be one activity or a list which appears somewhere on the homepage.</p>
<p>Create a specific section of the website devoted to PL</p>  <p>Implement a tagging system for PL resources (just like activities)</p>  <p>Link activities to relevant PL resources</p> 	<p>Some teachers mentioned having access to resources that are shared during PLs would be appreciated. We feel a separate tab with a similar search system to normal activities could be a way of sharing these. We aren't entirely sure the best way of implementing PLs into Story Hubs Digital but we would recommend looking into adding them. If they are added we feel linking activities with PLs would help guide teachers into how to make activities even more exciting.</p>