

CS6460 - Summer 2020

Project Proposal: Prototyping Insignia, A Platform To Create And Explore Unique Digital Portfolios

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Abstract—The purpose of this paper is to introduce the project I will be developing for the remainder of the semester. I plan to create a web application that offers two essential services: empowering users to share a portfolio of their unique work, and connecting them with other users and resources that align with personalized learning goals. The target audience is American students from 9th grade and beyond, but in theory anyone with an internet connection could benefit from a platform to explore projects on any topic. Users will have the ability to post projects publicly or share them privately with other accounts on the platform which may include students, teachers, parents, school districts, universities, and corporations. The COVID-19 pandemic has forced campuses to close, and my hope is that such a platform would help students easily discover projects they are interested in, and also show off completed projects to teachers, university admission departments, and managers looking to hire specialized talent.

1 INTRODUCTION

Through research, I examined the history of our traditional learning system to better understand our past and the role of government; I examined online learning models and the degree to which they disrupt and support education systems; I examined homeschooling benefits and drawbacks as an alternative to the traditional system; and I encountered hybrid learning models which combine aspects from traditional, online, and homeschool learning models. I have come to the conclusion that the American education system needs to focus less on standardized testing and more on personalized learning technology that involves all the key stakeholders in the learning process.

1.1 Outlining Important Facts and Issues

Below are some lists of important facts and problems with the American education system. Some of these facts support the need for my current project proposal, and some simply demonstrate the need to move away from a problematic system in favor of a hybrid learning model. The overarching theme is that traditional learning is too standardized and impersonal, but homeschooling is too segmented and hard to track academic progress.

1.1.1 *Traditional Learning*

- Historically, as the Department of Education's funding grew, so too did class sizes (Department of Education, 2010). Students inherently receive less personalized attention regarding academic progress and mental health (Lindsay, 1982) .
- Depression in adolescents is easily missed (Bansal, Goyal, and Srivastava, 2009), especially in large, lecture-style classes
- Major mental health and gun violence concerns with traditional K-12 schools have become disturbingly more prominent from 1999 to 2018 (Livingston, Rossheim, and Hall, 2019)
- Policy makers fail to agree on what causes the mental health issues related to school shootings and how to prevent these tragedies (Lawrence and Birkland, 2004), and so safety problems persist
- Given the vast amount of learning material available for free online, using class time to lecture students in traditional learning systems is a wasted opportunity to apply flipped learning techniques which foster individual creativity and to help students be autonomous and specialize in what they find most interesting (Alamry and Karaali, 2016).
- In-person, traditional learning models became unfeasible in 2020 as the COVID-19 pandemic forced schools and university campuses to shut their doors while families sheltered and quarantined at home (UNESCO, 2020).
- Even while in the classroom, students in traditional learning systems are limited by the knowledge and creativity of one teacher for one subject or one teacher for several subjects.

1.1.2 Online Learning

- Because of COVID-19, hybrid learning models were imposed upon families, students, teachers, and school districts who scrambled to put distance learning resources to work, such as Google Classroom (LearnPlatform, 2019).
- 80% of students who enrolled in MOOCs wanted more help with course content and more face-to-face interaction with instructors and other students (Clow, 2013), which suggests that online learning on its own is not enough.
- All MOOCs should be more considerate of global barriers to equality of access (Adam, 2019)
- Corporations are sponsoring MOOCs and post-secondary degrees in order to incentivize students to obtain the skills that are both in high-demand and under-supplied in the workforce. Meaning, some corporations are not seeing enough value in high school or undergraduate diplomas.
- There is an academic arms race to obtain more high level degrees and certifications, and students are suffering from unprecedented levels of student loan debt (Economist, 2018). This trend may continue with the emergence of lower cost masters degree programs like OMSCS unless value is somehow returned to lower level degrees.

1.1.3 Homeschooling

- Students in homeschooling environments are limited by what they can find online and the knowledge, creativity, and financial resources of their parents.
- Surveying homeschooling students for academic progress is difficult (Greenwalt, 2019)
- Most states do not require homeschool students to take standardized tests or submit portfolios because powerful lobby groups like the HSLDA prevent legislation from passing that would impose any lesson plan requirements or progress monitoring (Huseman, 2017).
- A small number of states in the northeastern part of America already require end of year portfolio reviews for homeschooled students. Many homeschool resources suggest that parents create physical binders to showcase the work, and parents must travel to review the academic progress in-person if they are unable to find a loophole that enables them to avoid review entirely (Huseman, 2017).
- Homeschool students have more time for extracurricular social activities like

scouting, sports, art, and community programs (McDowell, 2017), but not all students have equal access to these types of programs and opportunities near home.

- Universities, when making admission decisions, have different preferences and requirements regarding extracurriculars, transcripts, coursework, GPA, standardized testing scores.
- Universities tend to place higher emphasis on standardized testing for students that are homeschooled (Huseman, 2017), even though quality of education can vary as much from teacher to teacher as it can from parent to parent.
- There is a stigma against homeschooled students that they are anti-social and unexposed to diverse learning material (Watson, 2019).

1.2 Sifting through the problems and determining where to help

Initially, my intent was to create a service that helps families get started with homeschooling, understand their options and legal obligations, and create personalized lesson plans. During my research, I discovered that several online resources and organizations already exist to help tackle all of these specific challenges (HSLDA, 2020). However, the largest organization in this space, the HSLDA, which serves over 80,000 families both charges money and promotes a particular religion (HSLDA, 2020). According to Huseman (2017), the HSLDA is the most powerful homeschooling lobby group. They also offer 40 live, interactive online courses which are taught "from a distinctly Christian perspective" (HSLDA, 2020). To best serve all students during this pandemic, there should probably be some sort of platform to help students make creative lesson plans that is free and that does not have strong ties to any particular religion.

When school campuses eventually reopen there will still be a problem with overcrowded classrooms and over-standardized learning objectives. And there will also still be an academic arms race because students who taught in a standardized manner will continue to search for high paying jobs at companies which do not see the value in a high school diploma, and see diminished value in undergraduate degrees (Kliebard, 1988; Economist, 2018; Flint, 1998). Alternatively if personalized learning and homeschooling on their own were the clear path forward to better jobs, then homeschooling would likely be more popular. There is still a stigma against homeschooling students because of the lack of academic regulation and because parents have too much curricular influence. How can anyone be sure that homeschooling students are actually learning anything?

Clearly, there exists a greater need for traditional learning systems to focus more on personalized learning experiences. But its also clear that extremely personalized learning plans and the academic freedom granted with homeschooling makes it tough to know if students are really learning. I plan to create a web application that helps students stand out from the crowd, showcase their academic development, and explore what other students are working on.

The missing ingredient in a hybrid learning model recipe is a platform that offers two essential services: empowering students to share a digital portfolio of their unique work, and connecting them with other students and resources that align with personalized learning goals. The next subsection covers more on who will benefit from a platform like what I am proposing.

1.3 Who benefits and how

When a tool like this is established, students will...

- Be able to explore interesting work that other students are doing
- Be exposed to creative projects outside of their physical learning environment
- Be able to distinguish themselves among their peers for university and job applications
- Showcase a portfolio of their academic accomplishments for private and public reviewing needs.
- Focus more on unique learning experiences of interest rather than preparing for standardized tests

Other stakeholders in the learning process will be able to benefit as well:

- Teachers and parents that homeschool will both have an easier time exploring unique projects and learning activities to support a lesson plan.
- Companies can benefit from reviewing projects from applicants to search for unique skills
- Similarly universities can showcase, with student permission, some of the most interesting research, software, and art projects that admitted students are working on when trying to attract new applicants
- The government may have an easier time passing legislation to ensure academic progress with distance learning and homeschooling via these digital portfolios.

2 RELATED WORK

2.1 Time4Learning

Time4Learning is a website that provides free and paid subscription services to support homeschooling. They offer a service called Time4Friends, which is only for students enrolled in their high school program which also costs money. The content can only be accessed by students, parents, and pre-screened Time4Learning monitors (Time4Learning, 2020).

Unlike Time4Learning, my platform will be open to the public, and each student will have a profile that showcases their published work. They will also have access to create private portfolios unavailable to the public where limited access can be granted to universities of interests, corporations of interest, parents, teachers, and classmates.

2.2 SeeSaw

SeeSaw is a very similar concept to my platform because both aim support students, teachers, and families with remote learning by showcasing the work the students have accomplished. While their services are compatible with popular distance learning tools like the collaborative Google documents, their platform lacks any sort of project search functionality or social media functionality to let students publish their work openly (Seesaw, 2020). Also the different types of users that can join the platform are more limited as well, and their audience seems to target younger students. There are different levels of service, but is always free for students and parents. Perhaps the most important use case they support is collaboration with school districts to enable portfolio review.

2.3 Canvas

I've been using Canvas for over two years and never knew about the portfolio feature until this semester. Their model most closely resembles the type of portfolio profiles I plan to implement; however, there is no functionality to support exploring projects from other students, companies, or universities. Canvas does enable an important features to allow some projects in a portfolio to remain private and others to be published openly. The only way to view a portfolio appears to be via a sharable link.

2.4 Social Media

Some parents use social media to showcase projects and explore learning activities. YouTube, Instagram, Twitter, and Pinterest offer valuable services at zero cost to post and organize content. Parents that homeschool young children in states that require portfolio review often create physical portfolios (Huseman, 2017) but also utilize these social media platforms to digitally augment the portfolios. These kinds of families could benefit from a digital portfolio platform, especially if it also incorporated search functionality to explore project content.

3 PROPOSED WORK AND SCOPE

I plan to create a web application that offers two essential services: empowering students to share a portfolio of their unique work, and connecting them with other students and resources that align with personalized learning goals. Without having resources and necessary content from users to scale this project, a simple prototype of such a web application must suffice.

3.1 Who are the users?

The core user of this product is a student. More specifically, a student that has flexibility via distance learning or homeschooling to pursue their own projects and academic interests.

There must also be accounts for parents, teachers, and school district officials. Enabling universities and corporations to have verified accounts would improve the product by fostering greater involvement from all interested stakeholders in the learning process, but currently this is not considered essential feature for the service.

3.2 What it will look like?

3.2.1 Portfolio Page and Project Tiles

- Each registered user will have a single portfolio profile page, which displays a username, a description of the user or the entire portfolio, and last, the content that the user wishes to include in a portfolio.
- Each portfolio will be composed of tiles. These tiles either represent a single project or a group of related projects. Some projects can stand alone, and do not need to be put into a cluster. To offer a parallel example, consider how the

iPhone screen displays standalone apps compared to a folder with a description that contains multiple apps.

- Single project tiles are called single tiles, and a tile that contains a group of related single project tiles is called a group tile.
- Clicking on a single tile should direct the viewer to wherever the content is hosted. In some cases this will be a simple YouTube video. In other cases, perhaps a social media post, a Github repository, a Google collaborative document, or a pdf file stored through this service which can all simply be opened in another tab.
- When a group tile is clicked, a new page is loaded in the same browser tab where all of the single tiles will be shown that belong to that group tile.
- All tile settings will have a textfield for users to input tiletags that are relevant to the content. These tiletags begin with the # symbol and can contain letters and numbers only. This will enable content searches based on usernames or tiletags.
- Each tile should have a description limited to at most 280 character in case the project might be shared on Twitter. For the prototype version, tiles will not have content previews of images or videos.
- A single tile could belong to multiple group tiles in the users portfolio. For example, suppose one of your projects falls into multiple categories.
- A single tile could belong to multiple group tiles across multiple users. For example, suppose your professor and your university both wanted to showcase your impressive work in a group tile on their own portfolios.
- Each tile will have an icon to add it to the users favorite page, a button to follow the link for that tile, a button to route them to the tile owner's portfolio page, and some time or date stamp to show when the tile was created.

3.2.2 Tile Privacy Settings

- Privacy settings can be set at the tile level to one of three options: completely public, completely private, or private with exceptions. In the 'private with exceptions' option, tile owners can specify other users to have access to view the tile by including their username in the tile privacy settings.
- These privacy settings will be available for both single tiles and group tiles.
- When inside of a particular group tile, a single tile inherits the privacy settings of the group tile which are set by the owner of the group tile. This will help students share work with teachers, who might want to share a strong project

from the current or some previous semester with the entire class.

- Each tile will have an immutable unique id so that tile groupings can be tracked and loaded appropriately onto a portfolio page.

3.2.3 Favorites Page

Users will have the option to favorite projects by clicking the favorite icon shown on a tile. Users can access their favorite projects and review them later by using the navigation bar to go to the favorites page.

3.2.4 Trending Page

Users can scroll through a list of public projects that are trending across the platform based on the number of favorites the tile has received over a certain period of time.

3.2.5 Specialize Page

The specialization feed is unique to each user, because the project tiles returned will be based on a list of tags that represent the users personal interests.

- These tags can be completely unrelated.
- The user will have the ability to edit a list of tags that relate to their own personal interests.
- In future versions outside of this class, it would be nice to implement a recommendation system based on the type of academic content the user posts to their portfolio and also what the user favorites.
- It's possible that the specialization feed may also include tiles from other people or organizations that the user follows.

3.2.6 Network Page

The academic network page is a list of who the user is following. Currently, the plan is to have this list of users look like tiles as well, but formatted slightly differently.

- Instead of a favorite button, there would be a follow or unfollow button.
- Instead of a link to a project, clicking a user tile would link to the user's portfolio.
- The description on this tile should be pulled from the description in the portfolio page.

- There may be some type of indication about the type of user, such as student, parent, teacher, college, business, etc.
- The tile may be a different shape or color to signify a clear difference between user tiles and project based tiles.
- Currently there are no plans to do group user tiles.

3.2.7 Settings Page

There must be a settings page so the users can update their account information and specialization interests. On this page, users should be able to update their password, update their email address, update their username, update the tile-tags used in their specialization feed, link them to their edit portfolio page, and have access to any other platform wide settings that may be necessary.

3.2.8 Search Page

- Search functionality must also be incorporated so that students can explore publicly available tiles. Likewise, teachers must be able to search for a particular student and projects related to potential lesson plans. Thus search capability must include results based on tiletags and usernames at minimum.
- Anyone with an internet connection can search the publicly available project tiles and portfolios without needing to create an account. This would hopefully encourage more users to create an account in the long run.
- The search page will be divided into two parts. Perhaps simply by switching between the two filters.
- The first part would be search results returned from a projects based search.
- The second part would be search results returned from a search for people and organizations. These results can be based on the name on the portfolio or the unique username associated with a portfolio.

3.2.9 Landing Page

There must be a landing page to allow users to sign in to an existing account or register for a new account. The current plan is to allow unregistered users to search and explore public projects and portfolios, but this is not an essential feature.

3.2.10 Registration Page

This is how users will create an account and provide any of the relevant information needed based on the type of account they want to create. For example, creating an account for a school district, which may want to use the site to evaluate homeschooling portfolios, could be more involved than a generic student account. Currently there is no plan to verify email addresses and accounts for the prototype, but this would be necessary for a real product.

3.3 How the user will access it?

Access to the platform will start with the landing page. Users will log in, register, and potentially just search for public projects without even needing an account. The web application will initially be hosted locally, and no users will be able to access it until the domain has been registered and the web application is hosted on a remote server.

3.4 What languages or libraries it will be built in?

The prototype of this service will be developed using Python to create a Flask web application. There are several templates available online for public use that can be applied for this prototype to help speed up development. All sources will be credited wherever these free templates are utilized in the code.

3.5 How can the tool be evaluated?

The code and instructions to run the web application locally will be available on github and the web application itself will be hosted on a server so that the functionality described in this proposal can be tested. Please skip to the Final Deliverables section to see a layout of all the features that should be present and can be evaluated.

4 DELIVERABLES

4.1 Milestone 1

The minimum deliverable for this milestone will be a brief paper. In the paper, there will be an overview of the project, a discussion of the progress made on the project so far, some suggestions on areas of the design where I would like feedback, an explanation of any tasks left incomplete, and some brief remarks about next steps.

Additionally, there will be two links provided within the paper. One link will be to my YouTube channel where the user can find a video where I demo the wireframe design and narrate the functionality and show off some of the use cases. Because the wireframe will be designed in Adobe XD, the paper will also have a link to this document. Anyone reading the paper will be able to use that hyperlink, whether they subscribe to Adobe services or not, and then be able to explore the interactive wireframe and synthetic content on their own.

4.2 Milestone 2

The minimum deliverable for this milestone will be a paper. In the paper, there will be ...

- an overview of the project
- a discussion of the progress made on the project up to Milestone 1
- a discussion of the progress made since Milestone 1
- a link to a survey to ask about areas of the design where I would like feedback
- an explanation of any tasks left incomplete
- a link to a narrated video to demo the wireframe from Milestone 1
- a link to a narrated video to demo the progress made for Milestone 2
- a link to the website where the web application is hosted
- a link to GitHub with instructions on how to run the web application locally
- some brief details about next steps.

The website itself will showcase some basic user functionality like navigating between all of the main pages described in this proposal, but not all of the functionality will be completed. For example, some of the more complicated features like search and grouping project tiles together may take more time to finish implementing than other features. I do not expect the website to be as aesthetically pleasing as it will be in the Intermediate Milestone 1 wireframe design or in the Final Deliverable. There should be some synthetic projects and users visible on the website as well.

4.3 Final Deliverable

4.3.1 Project

The code and instructions to run the web application locally will be available on github, and barring any unforeseen issues the web application itself will also be hosted on a server so that the functionality described in this section can be

tested easily.

I plan to deliver the Insignia prototype application with the following features, which can be used to evaluate the web application:

- Users should be able to register an account
- Users should be able to edit their portfolios by adding, grouping, editing, and removing project based tiles.
- Users should be able to edit privacy settings at the tile level.
- Logging out and attempting to view a private tile should not be possible.
- Users should be able to see results in the favorites tab matching up with their profile history, and have the ability to unfavorite tiles.
- Users should be able to search for project tags, aka tiletags, as well search for people and organizations that have registered.
- Users should be able to change their specialization tiletags and see different yet relevant results. Ranking the relevancy of these results should not be evaluated because that's outside the scope of this prototype proposal.
- Users should be able to either follow or add other people and organizations to their academic network, and see these accounts listed on their network page.
- Users should be able to see the trending projects based on number of favorites over some period of time.
- Single tiles should have a project name, description of the project, a link to view the project content, a favorite button, a link to the tile owner's portfolio, and some date or time stamp information
- Fully functional links and navigation between different areas of the platform.
- Are there synthetic users to showcase at least one of each type of key stakeholder in the learning process described from research: students, teachers, parents, school districts, universities, and businesses?
- Does the tool empower students to share their own projects that they are proud of and explore projects that they might be interested in? Yes or no.
- Note: most of the project content will be links to other platforms like GitHub, YouTube video, etc; the goal is to reduce storage costs needed to operate this site since many other platforms already offer cloud storage with links. These external links should open in a new tab.

4.3.2 *Final Paper*

A comprehensive paper that summarizes the work accomplished this semester will be submitted.

4.3.3 *Final Presentation*

A 5 to 10 minute narrated video presentation that highlights the work accomplished this semester will be submitted. In addition to a walk through of the final Insignia prototype project, there will also be some helpful slides with research notes in the video. These slides will provide context and background on the problems that this platform helps to address.

5 TASK LIST

Each of the task groupings in the table will serve as a Sprint for this project, and weekly updates will be provided to measure progress and compare against the task list. The subtotal of hours for each sprint is as follows:

- Sprint 1: 14.25
- Sprint 2: 17.25
- Sprint 3: 14.25
- Sprint 4: 16.25
- Sprint 5: 19.25
- Sprint 6: 20.00

The grand total estimated time on this project based on the task list below is 101.25 hours.

Table 1—Task list for the semester

Deliv. Date	Exp. Hours	Description
2020-06-21	2	Research Flask best practices and how to host the web app locally
2020-06-21	2	Research ed tech design principles and social media design principles
2020-06-21	7	Spend time learning flask and reviewing useful free templates
2020-06-21	2	Set up the development environment
2020-06-21	1	Research Adobe XD alternatives to wireframe prototyping just to compare options
2020-06-21	0.25	Prepare weekly status check in
2020-06-28	2	Create some synthetic content to showcase features in wireframe design
2020-06-28	13	Create a wireframe design for how the app should function in Adobe XD
2020-06-28	1	Plan out demo, record Intermediate Milestone Video with narration
2020-06-28	1	Intermediate Milestone Paper with Links to YouTube and AdobeXD design
2020-06-28	0.25	Prepare weekly status check in
2020-07-05	1	Use feedback from Milestone 1 to change design plans if needed
2020-07-05	2	Create nav bar and routes to all pages described in proposal
2020-07-05	4	Design & implement relational database schema for users, tiles, and settings
2020-07-05	7	Integrate project tiles in portfolio page with skeleton to edit, create, and save
2020-07-05	0.25	Prepare weekly status check in
2020-07-12	2	Host website on a remote server and connect to a real database
2020-07-12	3	Ensure database is updated properly when various actions occur
2020-07-12	9	Integrate tiles into other nav bar pages; also implement tiletags
2020-07-12	2	Intermediate Milestone 2 - Paper and Video and Survey
2020-07-12	0.25	Prepare weekly status check in
2020-07-12	10	Implement basic search using hashtags and usernames
2020-07-19	6	Implement feedback changes, improve aesthetics, finalize synthetic content
2020-07-19	3	Begin drafting final paper and create presentation outline
2020-07-19	0.25	Prepare final weekly status check in
2020-07-26	5	Polish features and user interface aesthetics, perform final testing
2020-07-26	10	Finish final paper and then find a way to trim it down to just 12 pages
2020-07-26	5	Create the presentation

6 REFERENCES

- [1] Adam, Taskeen (2019). "Digital neocolonialism and massive open online courses (MOOCs): colonial pasts and neoliberal futures". In: *Learning, Media and Technology* 44.3, pp. 365–380.
- [2] Alamry, Adel and Karaali, Abeer (2016). "Flipped education: Transitioning to the homeschool environment". In: *Cogent Education* 3.1, p. 1224607.
- [3] Bansal, Vivek, Goyal, Sunil, and Srivastava, Kalpana (2009). "Study of prevalence of depression in adolescent students of a public school". In: *Industrial psychiatry journal* 18.1, p. 43.
- [4] Clow, Doug (2013). "MOOCs and the funnel of participation". In: *Proceedings of the third international conference on learning analytics and knowledge*, pp. 185–189.
- [5] Department of Education, U.S. (2010). "An Overview of the U.S. Department of Education". In: URL: <https://www2.ed.gov/about/overview/focus/what.html>.
- [6] Economist, The (2018). "Expanding higher education: Time to end the academic arms race". In: URL: <https://www.economist.com/leaders/2018/02/03/time-to-end-the-academic-arms-race>.
- [7] Flint, Thomas A (1998). "T an unprecedented degree American college students mortgage their". In: *Journal of Student Financial Aid* 28.2, p. 1.
- [8] Greenwalt, Kyle (2019). "Homeschooling in the United States". In: *Oxford Research Encyclopedia of Education*.
- [9] HSLDA, The (2020). "Making homeschooling possible". In: URL: <https://hsllda.org>.
- [10] Huseman, Jessica (2017). "THE UNBELIEVABLE POWER OF THE HOME-SCHOOLING LOBBY". In: URL: <https://psmag.com/education/the-unbelievable-power-of-the-home-schooling-lobby>.
- [11] Kliebard, Herbert M (1988). "Success and failure in educational reform: Are there historical "lessons"?" In: *Peabody Journal of Education* 65.2, pp. 143–157.
- [12] Lawrence, Regina G and Birkland, Thomas A (2004). "Guns, Hollywood, and school safety: Defining the school-shooting problem across public arenas". In: *Social Science Quarterly* 85.5, pp. 1193–1207.
- [13] LearnPlatform, The (2019). "EDTECH INSIGHTS 2018-2019 School Year EdTech Top 40". In: URL: <https://learnplatform.com/insights>.

- [14] Lindsay, Paul (1982). "The effect of high school size on student participation, satisfaction, and attendance". In: *Educational Evaluation and Policy Analysis* 4.1, pp. 57–65.
- [15] Livingston, Melvin D, Rossheim, Matthew E, and Hall, Kelli Stidham (2019). "A descriptive analysis of school and school shooter characteristics and the severity of school shootings in the United States, 1999–2018". In: *Journal of Adolescent Health* 64.6, pp. 797–799.
- [16] McDowell, Candi (2017). "An Analysis of Homeschool Resources used in the Chicagoland Area". PhD thesis.
- [17] Seesaw (2020). "Remote Learning with Seesaw". In: URL: <https://web.seesaw.me/>.
- [18] Time4Learning (2020). "Time4Learning and fun for everyone". In: URL: <https://www.time4learning.com/>.
- [19] UNESCO (2020). "Education: From disruption to recovery". In: URL: <https://en.unesco.org/covid19/educationresponse>.
- [20] Watson, Angela (2019). *Homeschooling: The History and Philosophy of a Controversial Practice*: by James G. Dwyer and Shawn F. Peters, Chicago, IL, The University of Chicago Press, 2019, 239 pp. ISBN 13-978-0-226-62725-0.