JOURNAL OF THE NACAA

ISSN 2158-9429

VOLUME 17, ISSUE 2 – DECEMBER, 2024

Editor: Linda Chalker-Scott

Shofner, C.[1]

[1]*Wahkiakum County Director and Associate Professor, Community and Economic Development, Washington State University Extension, Cathlamet, Washington, 98612-9713*

Surviving to Thriving: Ripple Effects Mapping Uncovers County Extension Impact through Tough Times

Abstract

Many Extension programs experienced reduced participation during and after COVID-19 restrictions. In contrast, Wahkiakum County, Washington experienced sustained youth and volunteer involvement through the pandemic and grew as restrictions lifted. Ripple Effects Mapping (REM) sessions were conducted in early 2019 prior to COVID-19 restrictions and again in 2022 after they were lifted. Findings from REM shed new light on how Extension staff, youth and volunteers impacted Community Capitals before, during and after COVID-19 and the community as a whole. Results were compared to recession-era data, and they showed how Social, Cultural and Human Capitals maintained positive Extension impacts through time, and how these rippled to long term community impacts across other Community Capitals. The purpose of this research is to understand the long-term impact of Extension programs through challenges like budget cuts and COVID-19 and demonstrate this impact and show return on investment to stakeholders, like county commissioners and university administration.

Introduction

Imagine beginning work as a new County Extension Director in 2008 during a major recession – the county operating budget is zeroed out and a community is fighting for Extension's survival, including weekly picket lines in front of the courthouse. This County Extension Director asked, "How will we survive this recession?" And yet, Wahkiakum County Extension persisted through a global recession with strong community and volunteer support and increased grant and donor funding.

Twelve years later, imagine coming to work to learn via Zoom that no Extension volunteers or youth will be able to be inside in the same room together, in-person for many months and the university is requiring COVID-19 vaccinations of all volunteers (Figure 1). This County Extension Director wondered, "How will we support volunteers, youth and community physically apart? How will we survive through a global pandemic?" And yet, while many Extension programs experienced youth and volunteers leaving, Wahkiakum County Extension programs sustained youth and volunteer participation. Examples of specific vibrant programs include:

- 4-H volunteers, youth and staff rallied to create a virtual county fair and market sale.
- Master Gardeners delivered the first Virtual Seed Exchange, to replace the annual seed exchange at the Community Center.
- Volunteers sorted and distributed more than 100 packages of seed for local gardeners to start their gardens despite seed shortages.
- Master Gardeners volunteered more than 300 hours in the community garden and raised over 950 pounds of produce for the food bank and school meals program.
- A newly completed food processing center built with grants through Extension served as a hub to distribute large food donations to families in need through the school district.

Figure 1: The County 4-H Leader of the Year on the left receives his certificate from the County Extension Director in the outdoor drive-up County Recognition Day at the county fairgrounds during COVID-19 in 2020.

These survival stories were experienced in rural Wahkiakum County in southwest Washington with a small population of 4,422 people (US Census, 2020). The community experiences high levels of poverty and a limited tax base (Uyehara, 2023) that relies on limited timber revenues for the county's operations.

Beyond survival, Wahkiakum County Extension thrived following the pandemic. A specific example is the annual 4-H Covered Bridge Dinner; paused during the pandemic but sold out of tickets in a few days in 2022, and in just a few hours in 2024 (Figure 2).

Figure 2: Sold Out 4-H Covered Bridge Dinner after COVID-19.

After COVID-19, Wahkiakum County Extension saw new investments into 4-H from grantors and donors, receiving major statewide competitive grants for career exploration for $385,849 in Wahkiakum and Naselle-Grays River Valley School Districts between 2020 and 2024, and a new donation of $2,500 from a regional corporate donor.

In years following the pandemic, Wahkiakum County saw significant increases to 4-H enrollments with club enrollments exceeding pre-pandemic numbers. New in-school youth group enrollments allowed 4-H to reach nearly every student in Wahkiakum County, and several new volunteers enrolled in 4-H.

These positive outcomes led the County Extension Director to wonder: Why did this county experience increased Extension participation and funding? What was Extension’s impact in the county during and after the pandemic?

The County Extension Director aimed to understand the long-term impact of Extension programs through county budget cuts and COVID-19. The purpose of this research was to evaluate long-term impact of county Extension programs and demonstrate this impact and return on investment to Washington State University (WSU) administration and county commissioners.

Methods

Washington State University Extension professor and creator of Ripple Effects Mapping In-Depth Method, Debra Hansen, partnered with the WSU Extension statewide evaluation specialist to conduct an REM of the WSU Wahkiakum County Extension volunteers and staff in 2019, as part of an effort to measure return on investment of County Extension programs in several communities across Washington State. This process empowered Wahkiakum County staff and volunteers to see some of the systems-level and longer term impacts they made in their work. Based on this experience, the Wahkiakum County Extension Director requested another REM session in 2022, to see how Extension programs impacted the community during and after the pandemic.

Ripple Effects Mapping is a participatory evaluation technique that can be used to understand the intended and unintended results of a program or project on individuals, groups and communities. REM uses Appreciative Inquiry and Mind Mapping to collect stories of impact beyond a single perspective. REM collects impacts across stakeholders, provides time and space for stakeholders to give more depth and breadth than traditional program surveys, and in this case, shows many levels of return on investment across volunteer and funder contributions.

Extension staff and representatives from the county 4-H, Master Gardener and Marine Resources Committee were invited to participate in an in-person REM session in 2019. The lead facilitator mapped stories on butcher paper (Figure 3), while a note-taker recorded the stories on XMind mind-mapping software.

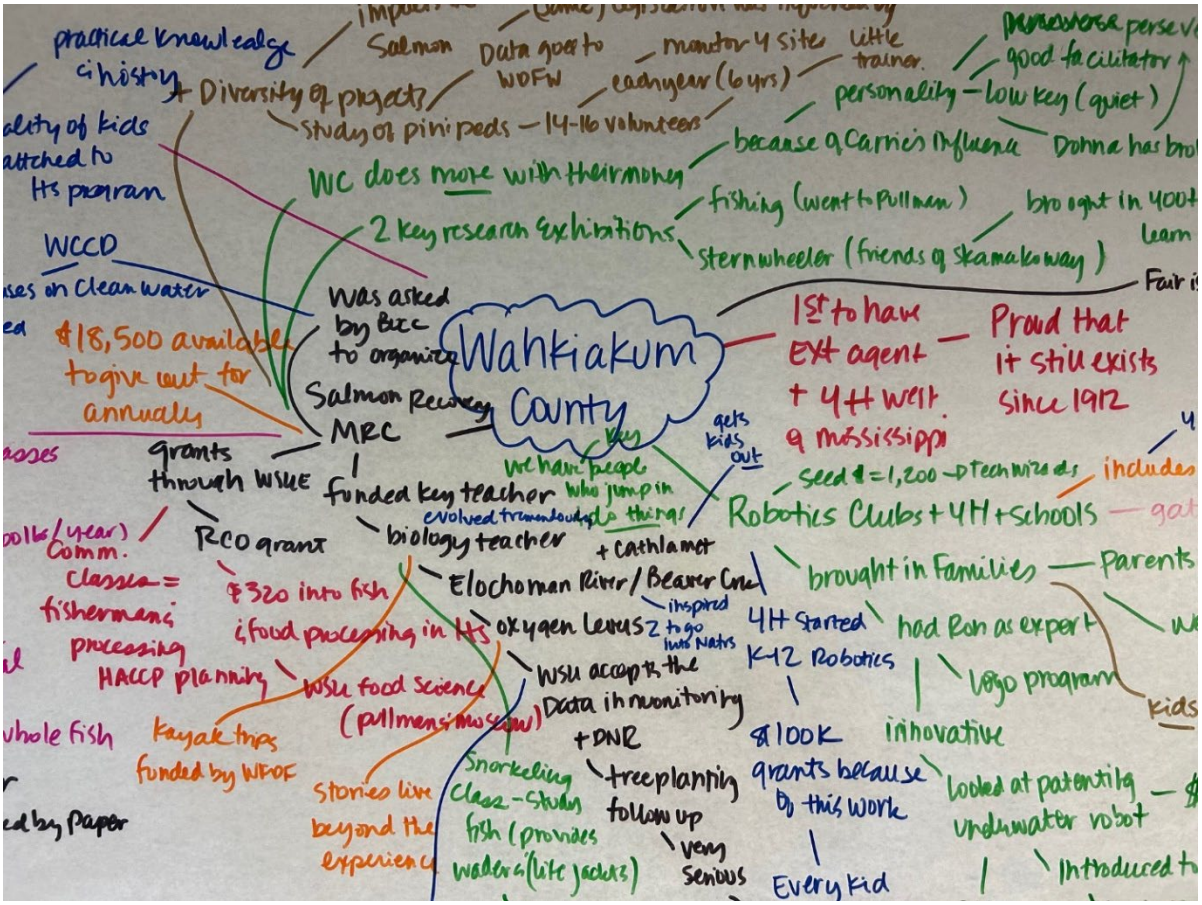

Figure 3: Mind mapping on butcher paper at the 2019 REM session.

The 2019 participants were asked these guiding questions based on an Appreciative Inquiry framework:

1. Tell us a story about how WSU Extension has had an impact within the community.
2. When thinking about WSU Extension's work, what makes you the proudest?
3. What programs are most valued by the community and why?
4. Which programs have had the most economic impact?

In 2022, the County Extension Director invited staff and volunteers for a hybrid REM session, with Hansen facilitating over Zoom, while participants gathered locally in-person to share stories. Again, the notetaker used XMind to map stories, and the session was recorded via Zoom to provide a transcription. The same questions were repeated from 2019, but participants were also asked:

5. How were Extension programs operated and valued through the pandemic?

The County Extension Director coded the stories in the mind maps from 2019 and 2022 using the Community Capitals Framework (Emery and Flora, 2006; Hansen, 2017) with guidance from the Field Guide to Ripple Effects Mapping (Chazdon et al., 2017).

Responses were coded across Social, Human, Cultural, Financial, Natural, Built and Political Capitals, as part of the Community Capitals Framework. This framework was chosen after considering literature on how this framework can show important trends in the community while sharing stories in a systemic way on the impact of the work (Emery, 2013; Emery and Flora, 2006). When reviewing responses, XMind and an Excel spreadsheet were used to categorize responses based on how the story addressed the following (Hansen, 2017):

- Social Capital: What can we do together?
- Human Capital: What can I do?
- Cultural Capital: How do we think and act?
- Financial Capital: How do we pay for things?
- Political Capital: How to we make decisions?
- Built Capital: What is built on the land?
- Natural Capital: What assets does the land give us?

Responses recorded in XMind were checked for accuracy with the recording from 2022, and with the hard copy of the map from 2019. Responses were then exported from XMind into an Excel spreadsheet and coded across the Community Capitals by marking in the spreadsheet columns under the Capitals where the responses aligned (Figure 4). Responses that aligned with more than one Community Capital were coded across multiple Community Capitals.

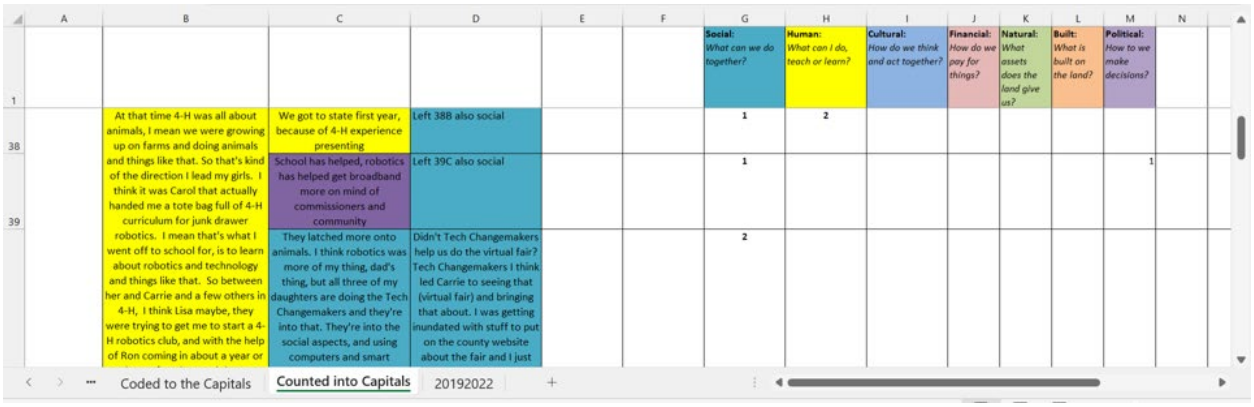

Figure 4: Excel spreadsheet used to code responses to Community Capitals.

Results

Ripple Effects Mapping is designed to be an accessible tool for a practitioner at the ground level, such as a County Extension Director, to get deeper understanding on program impacts and trends. Often there are no internal evaluation specialists to rely on for county agents, and external assistance comes at a cost. Results analyzed and summarized by the County Extension Director show important trends across 2019 and 2022, highlighting key themes on county Extension impact during challenging times.

2019

In 2019, several stories around Human and Social Community Capitals emerged. Participants spoke to the talents of volunteers and youth members (Figure 5), and their ability to pitch in and get things done together:

- *"Volunteers are highly capable and the community is receptive."*
- *"We have key people who jump in to do things."*
- *"Kids are the ones explaining to stakeholders."*

Figure 5: Human Capital – a highly capable Wahkiakum 4-H leader teaches a young 4-H member sewing skills.

Cultural Capital was evident in stories in 2019 around the history of 4-H and Extension in Wahkiakum County – home to one of the first 4-H clubs in the state in 1914 and the first Extension agent in 1912 (Figure 6). One volunteer spoke of her children and grandchildren being descendants of the first 4-H club members in the state in 1914. Another cultural theme was the importance of the county fair, with responses like *"Fair is important to this county."*

Figure 6: Cultural Capital – Photo of the 4-H Seal River Canning Club, one of the first 4-H clubs in the state of Washington in Wahkiakum County in 1914, and George Nelson, first county agent in the state.

As participants in 2019 were asked prompting questions to spur more “ripples” in the map, deeper stories emerged, with longer term outcomes, particularly in Political, Social and Human Capitals, of how their work positively changed policies and systems:

- Political –
    - *“Their (MRC volunteers’) work has influenced legislation…”*
    - *“Town of Cathlamet gives space and water (to Community Garden)…”*
- Social –
    - *“…Countywide effort -- everyone came together to save all the Extension programs.”*
    - *“This program started the momentum for the K12 Robotics Program.”*
- Human –
    - *“(Robotics) increased girls' participation and leadership…”*

2022

In 2022, Social and Cultural Capitals responses emerged again, particularly in stories of working through challenges during the pandemic.

- Social –
    - Volunteers and participants shared often about how they worked together: "*COVID caused us to think of new ways and come out -- from our own little clicks. We actually had to come together as 4-H, the Extension…"*
- Cultural –
    - Volunteers expressed the pride they felt in being recognized by the community with parades and sold-out fundraisers: "*They (4-H robotics club) were grand marshals at Bald Eagle Parade, not the basketball team. When does anything overtake sports, in Cathlamet or Naselle?"*

Increased stories emerged in 2022 around Political Capital (Figure 7), with participants sharing more how county commissioners appreciated Extension bringing new funds into the county, and how Extension staff, youth and volunteers worked with county commissioners through the pandemic on new grant funds, the county fair and broadband access.

- Political –
    - *"I think they (Commissioners) must be feeling pretty good about Extension because Extension has brought in a lot of money into our county…"*
    - *"We got commissioners involved. They helped us with funding and stuff like that. Although it's like pulling teeth, but we really got them involved."*

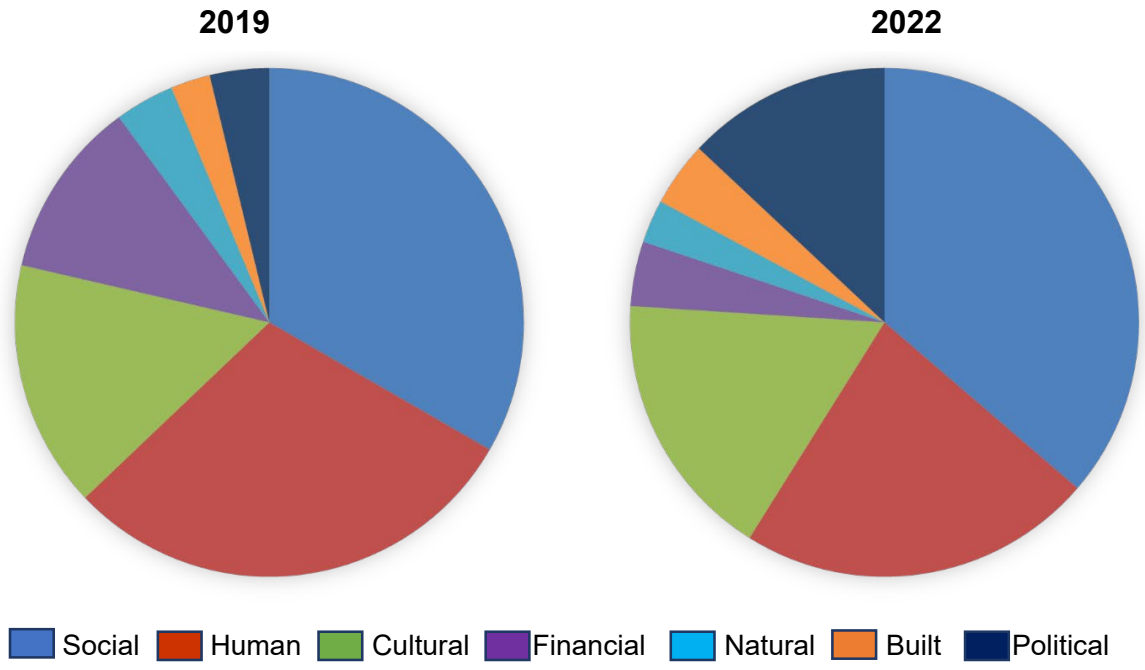

Figure 7: Comparison of Community Capitals between 2019 and 2022 REM sessions.

Similar to 2019, as participants were asked prompting questions to spur more “ripples” in the map, instances emerged where Human and Social Capitals rippled to long-term positive changes. Human and Social Capital of youth and volunteers’ work in technology rippled to new Built and Financial Capital and increased Political Capital. Their activities put the need for improved broadband access in the county at front of mind for local decision-makers, encouraging increased financial investment for broadband:

- *“School has helped, robotics has helped, get broadband more on mind of commissioners and community.”*
- *“It got our Wahkiakum West to move from the West to the East -- that's our local internet service provider.”*

Volunteers and staff shared how 4-H youth involved with robotics and the 4-H Tech Changemaker program (National 4-H Council, 2024) led much of the work for the virtual county fair during the pandemic. Youth created the format to share fair entries via photos and videos using Google Slides and YouTube. A 4-H leader and fair volunteer then worked with 4-H youth to link and upload these entries to the county fair website,

and then helped adults do the same to enter in open adult fair classes. This virtual fair allowed the Wahkiakum County Fair to continue through the pandemic when many other county fairs did not.

Youth and volunteers' Human and Social Capital rippled to new Financial Capital. Because of their work together to create a virtual fair, the Wahkiakum County Fair was eligible for a large portion of the state fair grants that year, because so many fairs were not operating and ineligible. As a result, the fair applied for and received more than $250,000 in grants from the state for a new barn and new paving of the midway:

- *"…We were one of the few fairs that got state funding. A lot of these buildings and the paving -- a lot of that came because we were one of the few fairs that didn't quit. We stayed open. Without 4-H, we wouldn't have been able to keep that fair open."*

Ripples also showed how investments of Human and Social Capital in the virtual fair created long term system and policy changes in the county 4-H program itself:

- "*I think it also opened up the opportunity for us to think differently about record books, presentations, the projects themselves. A lifetime ago it was a physical notebook -- you had to turn in a physical notebook that had 37 pages in it and things like that, and now we are open to the idea of totally doing it electronically…I think COVID helped that too, because that was the only way we were going to get it was electronically."*

Discussion

Patterns across 2019 and 2022 demonstrate how county Extension survived through each challenge and even thrived. In comparing patterns in Community Capitals across 2019 and 2022, trends that increased or remained strong were Social, Human and Cultural Capitals. These rippled out to new Built and Financial Capitals and increased Political Capital, creating long term impacts.

Elsewhere in Extension programs, REM similarly showed "spiraling up" of Social Capital. REM with Family and Consumer Science agents and volunteers in the North Carolina Extension Master Food Volunteer program discovered how volunteers increased Extension's bonding and bridging Social Capital to create a process of

expanded community engagement (Bloom, 2021). They found that volunteers helped Extension agents reach new areas, organizations, and populations, expanding impacts and increasing community access to resources.

Other REM research with 4-H youth demonstrated that Social Capital among youth and their leaders led to a “spiraling up” impacting their entire community (Emery, 2013). As youth described the Social Capital in bonding with each other and their 4-H leaders, they identified how their trust and reciprocity within the group helped them successfully implement projects in the community. Their relationships with 4-H leaders helped them connect and build Social Capital with other adults in the community who provided important information and connected youth with resources and opportunities beyond what they could have accessed on their own.

Conclusion

The “spiraling up” of Social Capital to other Capitals found in Extension scholarship validates findings of REM in Wahkiakum County, Washington. Wahkiakum staff and volunteers’ stories on how Social, Human and Cultural Capitals rippled out to deeper impacts to the community, like improved broadband access and fairground infrastructure, and showed how REM brought light to a full spectrum of diverse perspectives. REM invited viewpoints across volunteers and staff engaged in a variety of community roles beyond Extension. They could see far beyond what the County Extension Director could see – sharing how Extension efforts snowballed to positive change across the community. Instead of a lone agent with a flashlight out measuring impacts, REM brought together a team of staff and volunteers to light up a whole arena full of impacts.

When Social and Human Capital “spiraled up” to grow other capitals like Financial or Built capitals, these were usually long-term impacts. In the complex problems of the 21st century, this shows how Extension plays a unique role bridging relationships across community members and education to create meaningful positive change in

communities. “Embracing the public value of Extension education means repositioning the way we describe our work from what clients learn and do to what economic, environmental, and social conditions change,” (Franz, 2011).

These findings offer a new lens for program design for the county agent. Reports to funders, county commissioners, or promotion and tenure committees evaluate agents’ impact in acreage, dollars and clients’ knowledge gained. Programs are developed with these end metrics primarily in mind. A lesson learned in this experience showed while these metrics are important, the relationships built along the way -- the Social Capital of internal bonding among staff, youth and volunteers, as well as external bridging relationships with the county fair, schools and county commissioners – created the fertile ground necessary for meaningful environmental, economic and social change.

Implications for other county Extension agents may be to try participatory, appreciative inquiry evaluations like REM to see the longer-term impacts of their Extension programs. They may similarly find that their investments with youth and volunteers are paying dividends well beyond what they can see on their own. REM showed the Wahkiakum County Extension Director that while much of her program development focused on growing Financial Capital to survive, the Human and Social Capital made Extension thrive.

Acknowledgements

Thank you to Debra Hansen, Professor and Stevens County Extension Director, for facilitating Ripple Effects Mapping in Wahkiakum County and providing user-friendly resources for analysis.

Literature Cited

Bloom, J. 2021. “Spiraling up”: Using ripple effect mapping to evaluate how an extension volunteer program increases community development capacity. *Community Development* 52(1): 22-41.

Chazdon, S., M. Emery, D. Hansen, L. Higgins, and R. Sero. 2017. *A Field Guide to Ripple Effects Mapping*. University of Minnesota Libraries Publishing. Minneapolis, MN.

Emery, M. 2013. Social capital and youth development: toward a typology of program practices. *New Directions for Youth Development* (138): 49-59.

Emery, M., and Flora, C.B. 2006. Spiraling-up: mapping community transformation with community capitals framework. *Community Development* 37(1):19-35.

Franz, N.K. 2011. Advancing the public value movement: sustaining Extension during tough times. *Journal of Extension,* 49(2), Article 2COM2. https://www.joe.org/joe/2011april/pdf/JOE_v49_2comm2.pdf.

Hansen, D. 2017. Community capitals framework (CCF) guide. Appendix C. pp. 164. In: (Chazdon, S., M. Emery, D. Hansen, L. Higgins, and R. Sero eds.) *A Field Guide to Ripple Effects Mapping*. University of Minnesota Libraries Publishing. Minneapolis, MN.

National 4-H Council, 2024. Accessed on September 11, 2024 from https://4-h.org/programs/tech-changemakers/

US Census, 2020. Accessed on September 2, 2024 from https://www.census.gov/quickfacts/fact/table/wahkiakumcountywashington,WA/PST045223

Uyehara, K. 2023. Bond system, wealth inequity are targets of school-funding suit. *Salish Current.* Accessed on September 2, 2024 from https://salish-current.org/2023/03/02/bond-system-wealth-inequity-are-targets-of-school-funding-suit/