



# Information & Communications Technologies (ICT) and the Family

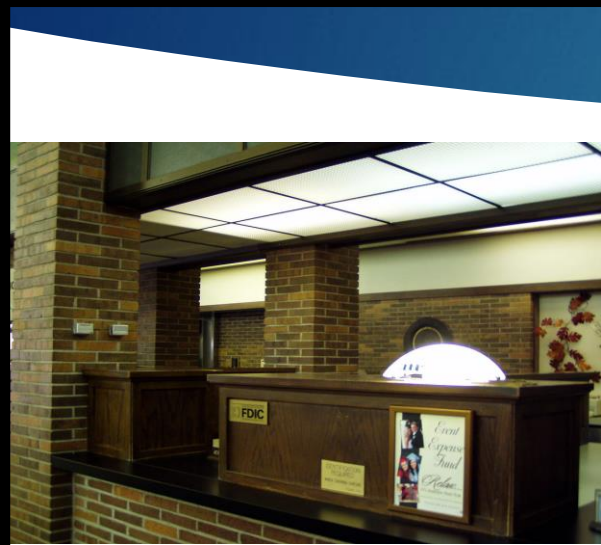
*SUSAN K WALKER, PHD*



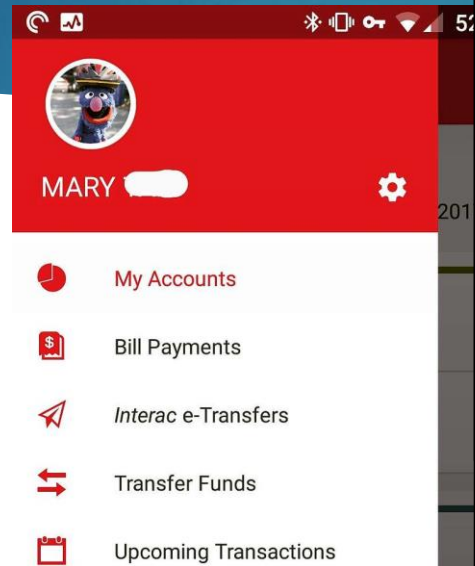
In Iroquois society, leaders are encouraged to remember seven generations in the past and consider seven generations in the future when making decisions that affect the people.

(Wilma Mankiller)

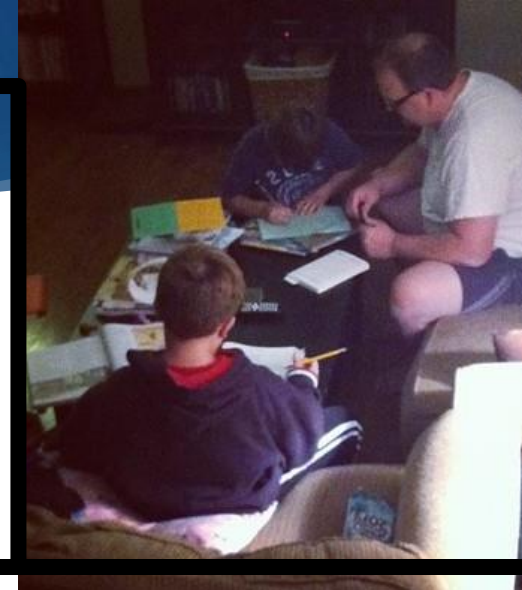
# Times have changed our perceptions of what managing family life means



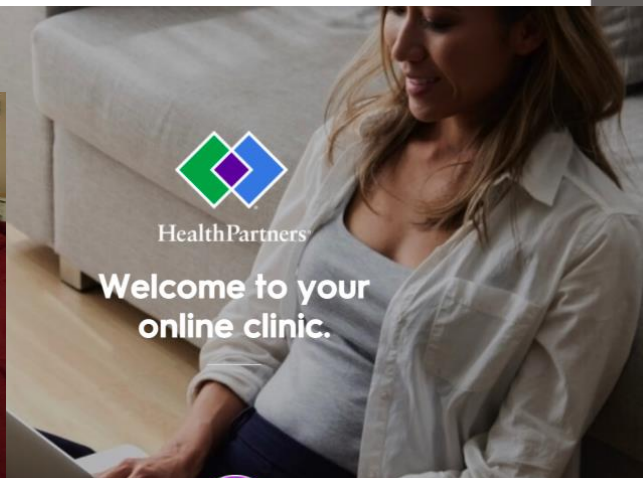
Money management



Helping with homework



Health care



work-family balance



# Looking the future

## On one hand...

- ▶ Greater convenience & efficiencies ('tele-everything', 'smart' devices, AI boom)
- ▶ Opportunities for personal expression, creativity.
- ▶ Work as more flexible, less bounded by time or place
  - ▶ Adaptable worker skills valued

## Yet, on the other....

- ▶ Growing social and racial inequality, worsening security and privacy and further spread of misinformation
- ▶ Peoples' mental health will be challenged
- ▶ Job insecurities due to employment shifts to automation, on-demand work

Anderson, J., et al, (2021, February 18). *Experts say the "New Normal" in 2025 will be far more tech-driven, presenting more challenges.*  
<https://www.pewresearch.org>

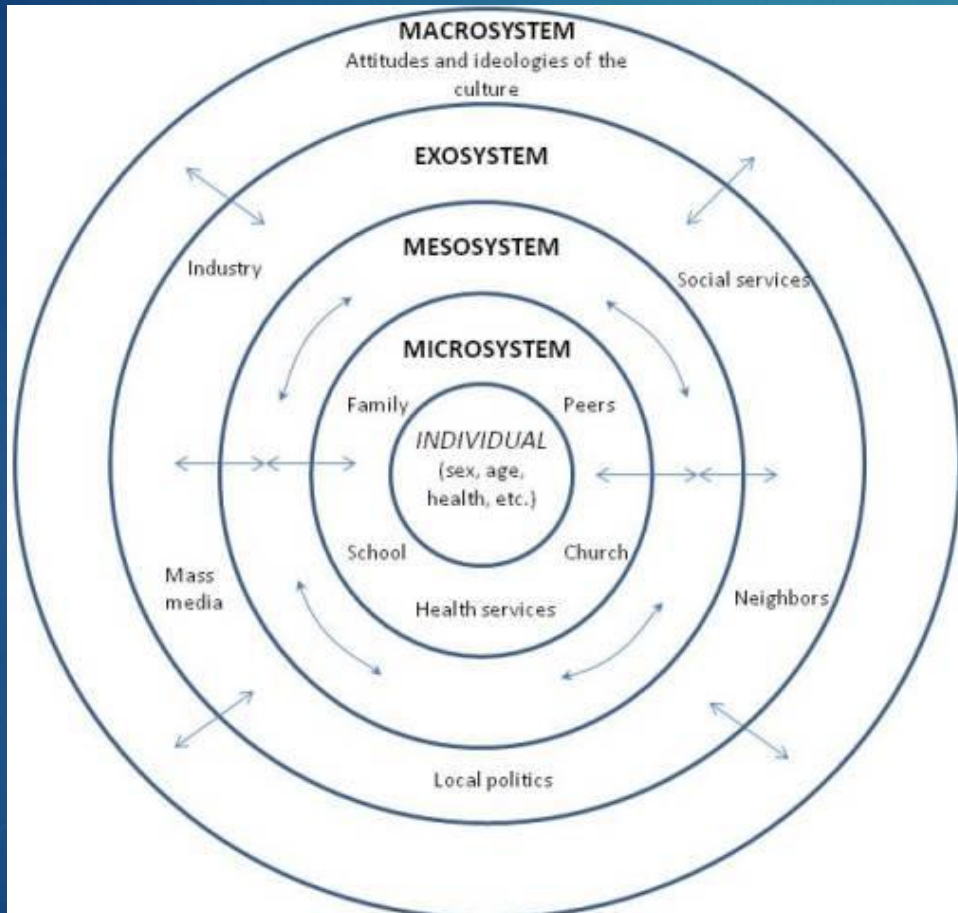
*The most important question we must ask ourselves is, 'are we being good ancestors'?*

- Jonas Salk, polio vaccine pioneer

The **ultimate effects of technology will be determined** by technical capabilities **and by how technology is used**, how individuals, organizations, **and policy makers prepare for/respond to shifts** in economic/social landscape.

National Academies of Science (2017): IT and the US Workforce: Where do we go from here?

# Bronfenbrenner's bioecological perspective on human development



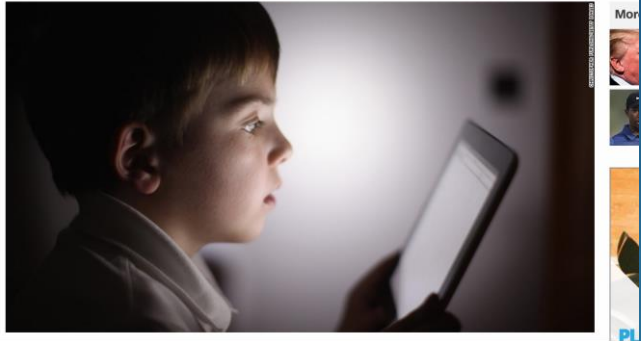
- ▶ Development as influenced by interactions of the person- in process and context – over time.
- ▶ Interactions that influence development are direct and indirect.

# Research challenges

- ▶ Rapid changes in technology, tech format, and tech availability
- ▶ Global variation in technology access & accommodations
- ▶ Wide variation in ways in which technology use (for families, personal, workplace)
  - ▶ Dissimilarities regarding technology access, use, comfort and skill
  - ▶ Dissimilarities in how devices and the internet are deployed as individuals, as a family and for work
- ▶ Types of employment, employment conditions, use of technology in those jobs, varies widely

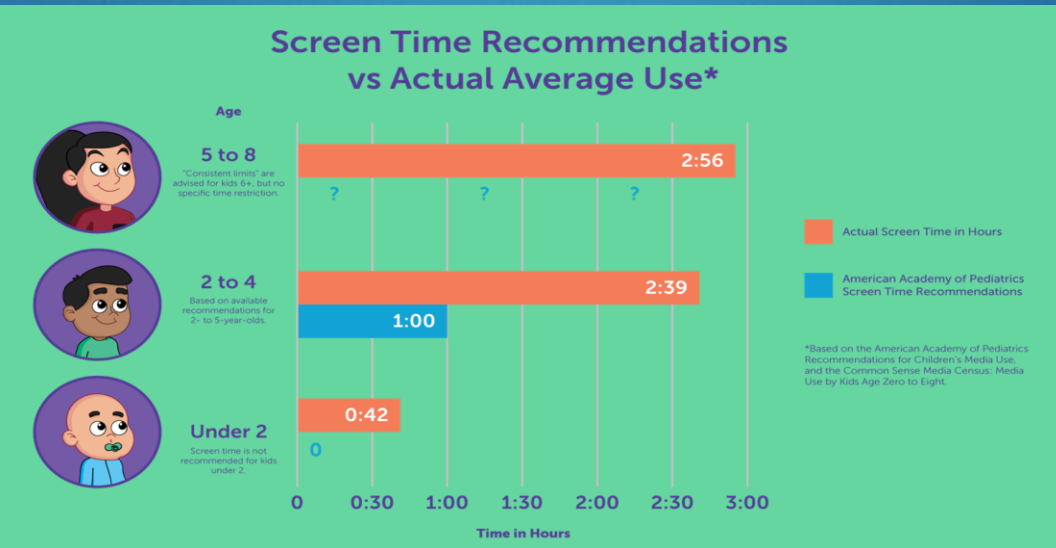
# Is the Internet hurting children?

By Chelsea Clinton and James P. Steyer, Special to CNN  
 Updated 10:04 AM ET, Mon May 21, 2012



## Have Smartphones Destroyed a Generation?

More comfortable online than out partying, post-Millennials are safer, physically, than adolescents have ever been. But they're on the brink of a mental-health crisis.



## Some Human Development Concerns:

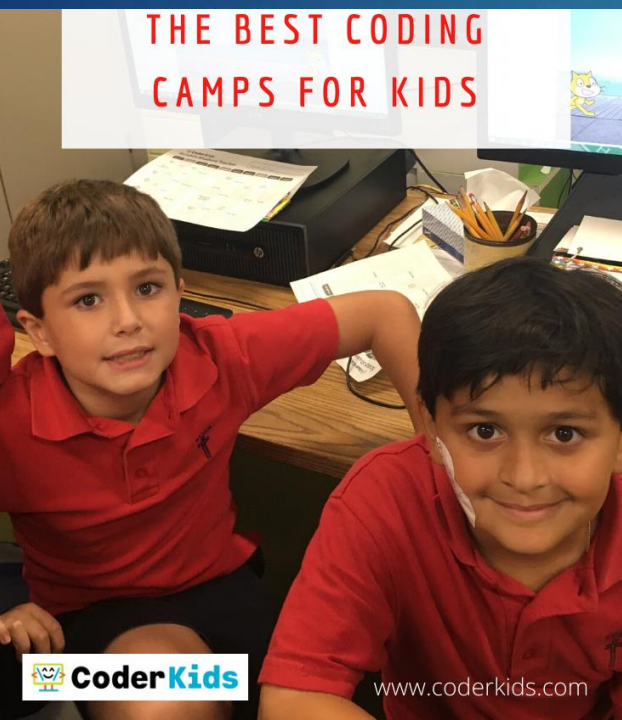
- Sleep
- Distraction from learning, socialization
- Possible addiction (e.g., internet gaming disorder)
- Obesity
- Bullying, damage to mental health
- Exposure to harmful images
- Exposure to online predators
- Security and privacy breaches





# INFLUENCER

THE BEST CODING CAMPS FOR KIDS

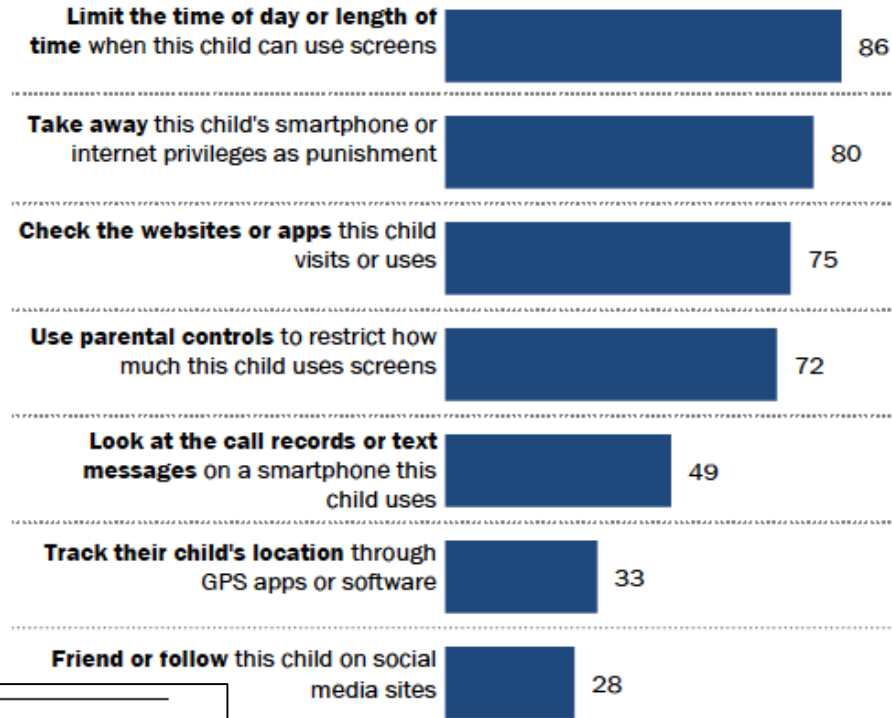


- Opportunities for learning and engagement.
- Creativity, collaboration, connectivity, and identity development.
- Personal expression
- Cultivating skills for adulthood



## Roughly eight-in-ten or more parents limit when and how long their child can use screens or digitally 'ground' their child

% of U.S. parents of a child age 5 to 11 who say they ...



## How to Make a Family Media Use Plan

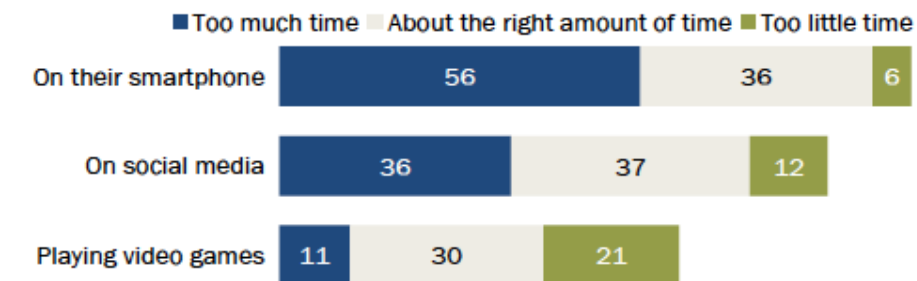
From TV to smartphones to social media, our lives are dominated by 24/7 media exposure. Despite this, many children and teens have few rules around their media use.

Parents, help your children balance their online and off-line lives!



## Roughly six-in-ten parents say they spend too much time on their smartphone

% of U.S. parents of who say they spend \_\_\_ on the following

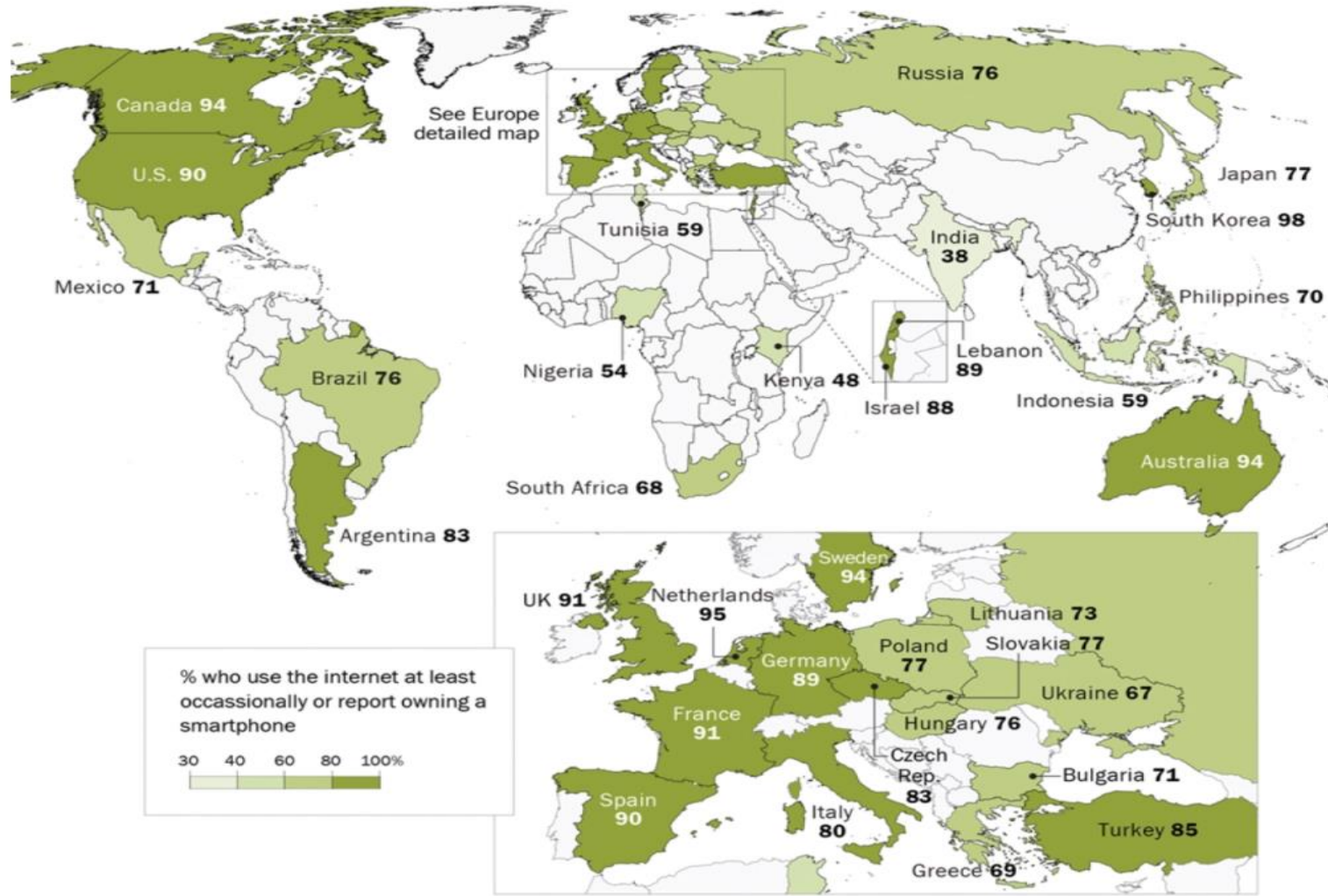


Auxier, B., Anderson, M., Perrin, A., and Turner, E. (2020, July 28). *Parenting Kids in the Age of Screens*. *Pew Internet and American Life*.

<https://www.pewresearch.org/internet/2020/07/28/parenting-children-in-the-age-of-screens/>

## Internet use is a prevalent part of many people's lives across the globe

% who use the internet, at least occasionally, or report owning a smartphone



Source: Spring 2019 Global Attitudes Survey. Q51 & Q53. U.S. data is from a Pew Research Center survey conducted Jan. 8-Feb. 7, 2019.

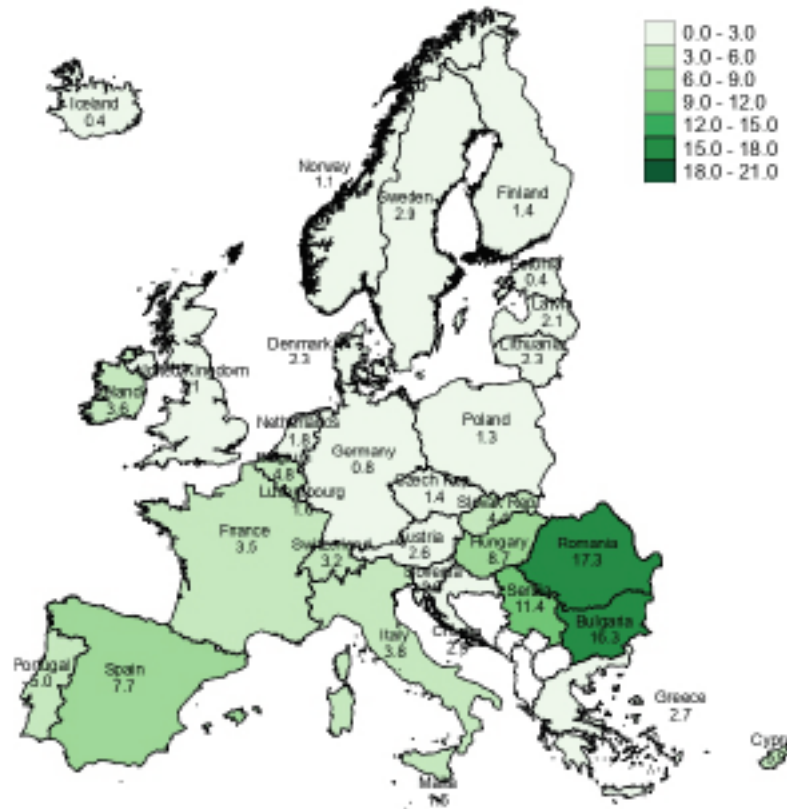
PEW RESEARCH CENTER

Internet access and use varies around the world. Although approximately 77% have internet access, this ranges from developed economies (e.g., US, EU) 98% to less developed economies (e.g., Africa, India), 13%.

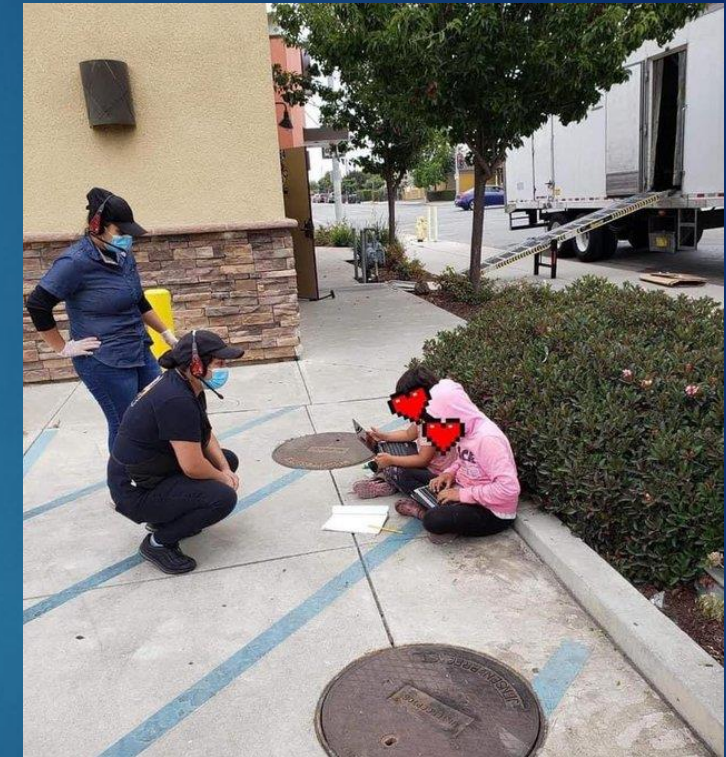
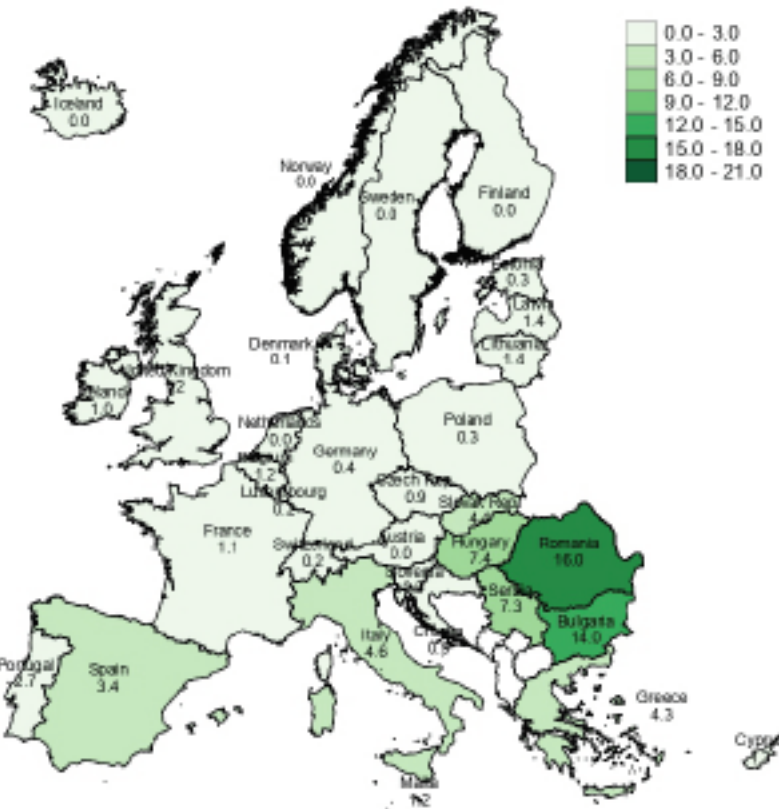
Schumacher, S. and Kent, N. (2020, April 2). 8 charts on internet use around the world as countries grapple with COVID-19. Pew Internet and American Life. Retrieved from <https://www.pewresearch.org/>

# European children (6-16) in households that cannot afford a computer (left); that cannot afford an internet connection

**Figure 2a:** Percentage of school-aged children (6-16) who live in a household that cannot afford a computer, Europe, 2019



**Figure 2b:** Percentage of school-aged children (6-16) who live in a household that cannot afford an internet connection, Europe, 2019

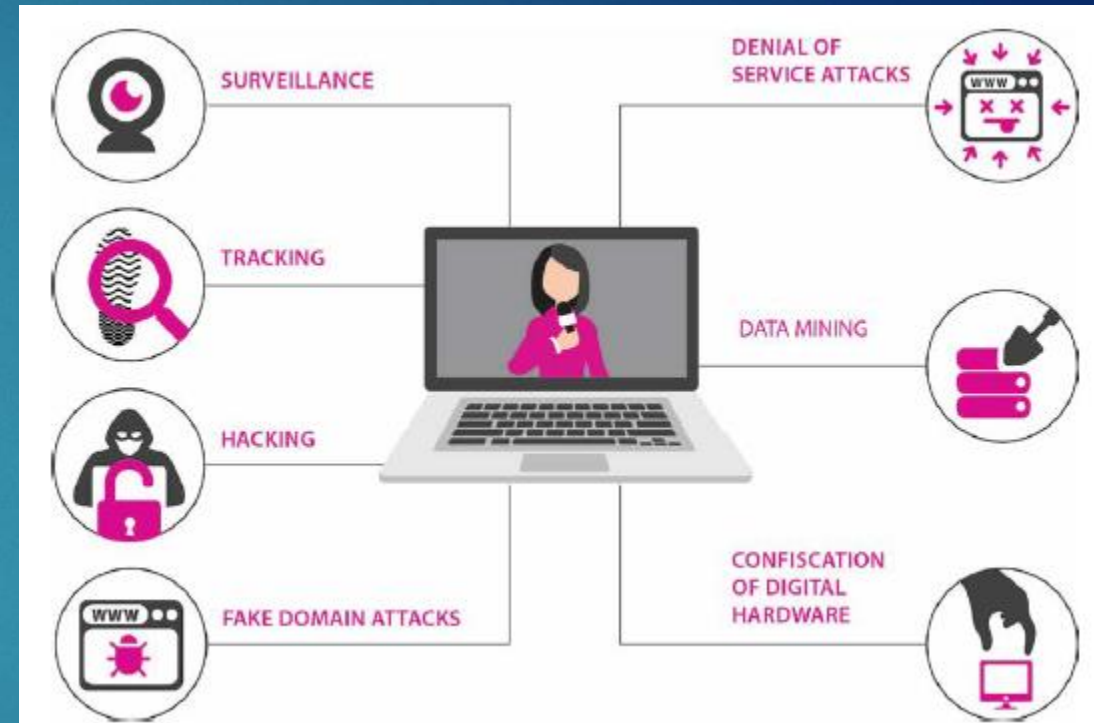
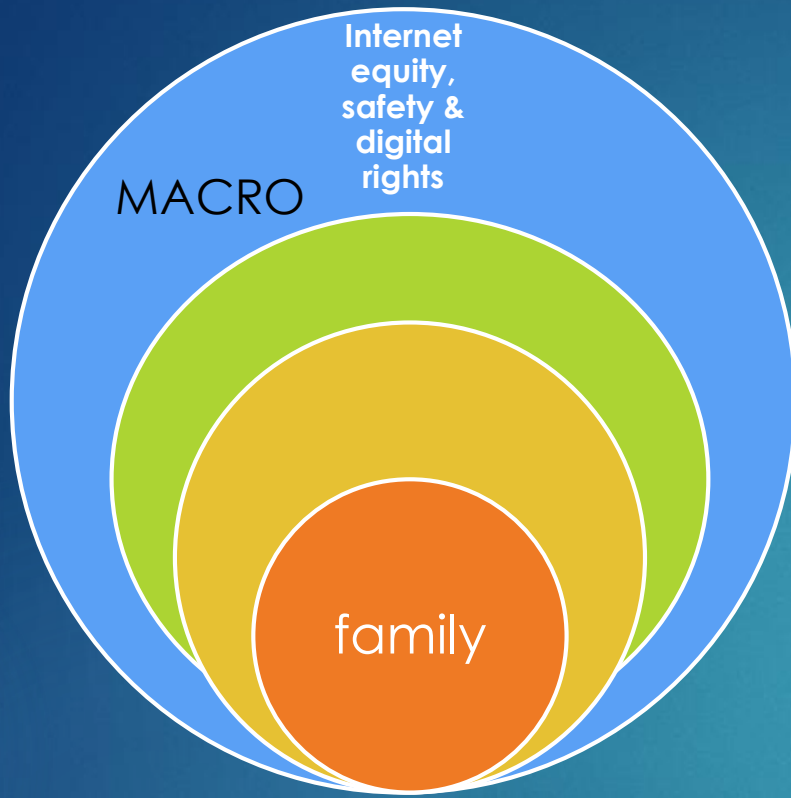


Ayllón, S., Holmarsdottir, H.B. & Lado, S. (2021). Digitally deprived children in Europe. (DigiGen - working paper series No. 3.

# Disparity impacts

- ▶ Inequalities between groups, exacerbates nations' economic inequality
- ▶ Representations of the idea of family
- ▶ Representations of gender
- ▶ Diminishing of families' members voices in the virtual environment
- ▶ 'cultural imperialism' – whose norms & values are transmitted?
- ▶ Family connection privilege or limitation

Karraker, M (2015). Global families in a digital age. In C. Breuss, Ed. *Families in a Digital World*. NY: Peter Lang., 55-75.



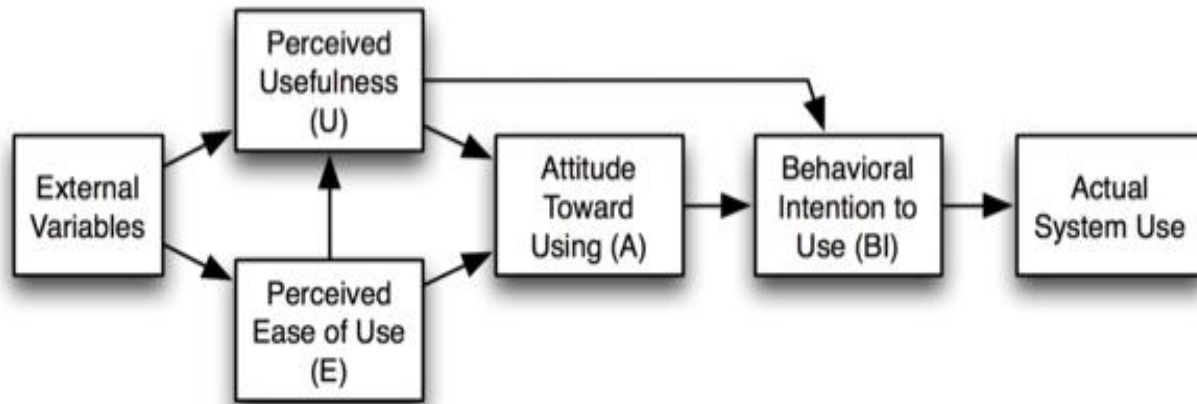
**Policy 1: internet access as a basic human right.**

- Help to create an infrastructure to enable all families access to internet and mobile computing

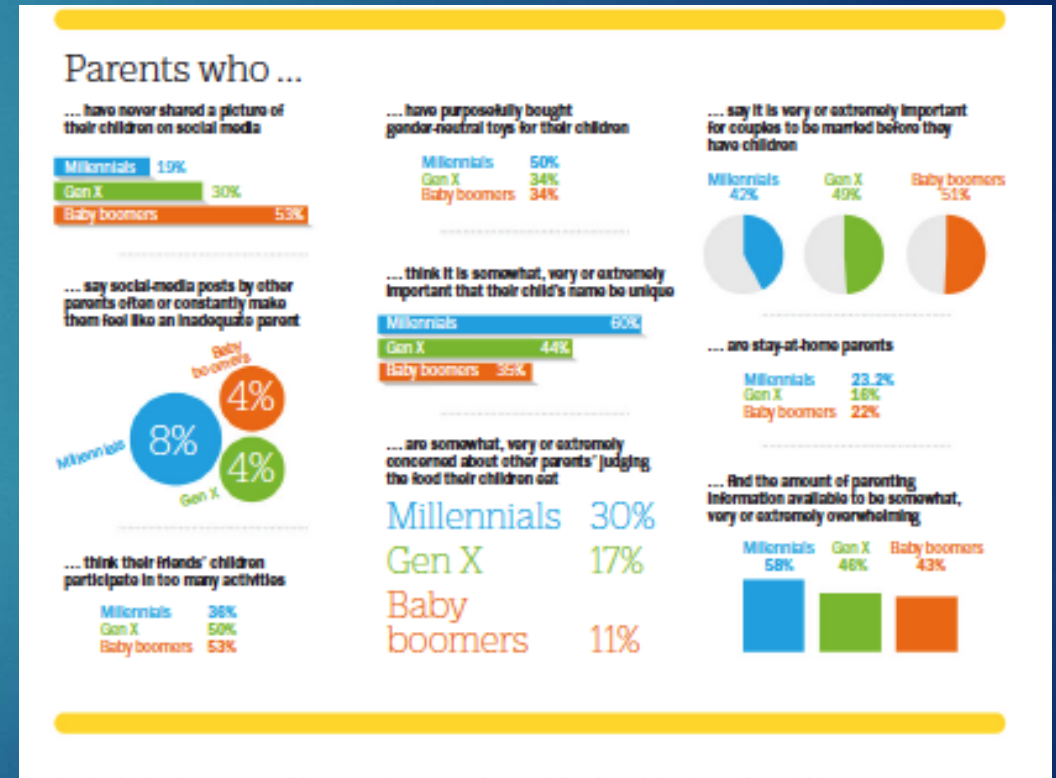
**Policy 2: Online spaces that protect digital rights.**

- Join in advocacy and action to ensure an internet that is safe, secure, private and companies in compliance

# Digital equity is also conditioned by comfort, skills and use - which are influenced by external factors



Davis, F.D. (1989). Perceived usefulness, perceived ease of use, and user acceptance information technology. *MIS Quarterly* 13, 319–340.



Steinmetz, K. (2015, October). Help, my parents are millennials. *Time*, 35–43.

# “New Ways of Working”\* as an external influence on technology use



## ▶ **Shifting conditions:**

- ▶ Flexibility: control over where and when responsibilities are completed
- ▶ Permeability: responsibilities fulfilled in non-traditional places and times

## ▶ **Workers establishing where and when work is done**

- ▶ A preference for autonomy in fulfilling work and family demands.
- ▶ Expressed comfort with mobile technology and cloud-based systems, especially by Millennials.

## ▶ **Probable Consequences:**

- ▶ Workers trapped in a 24/7 cycle; challenges to attention and focus
- ▶ Exposes the extra demands in role fulfillment when boundaries are eroded: COVID-19 as a natural experiment

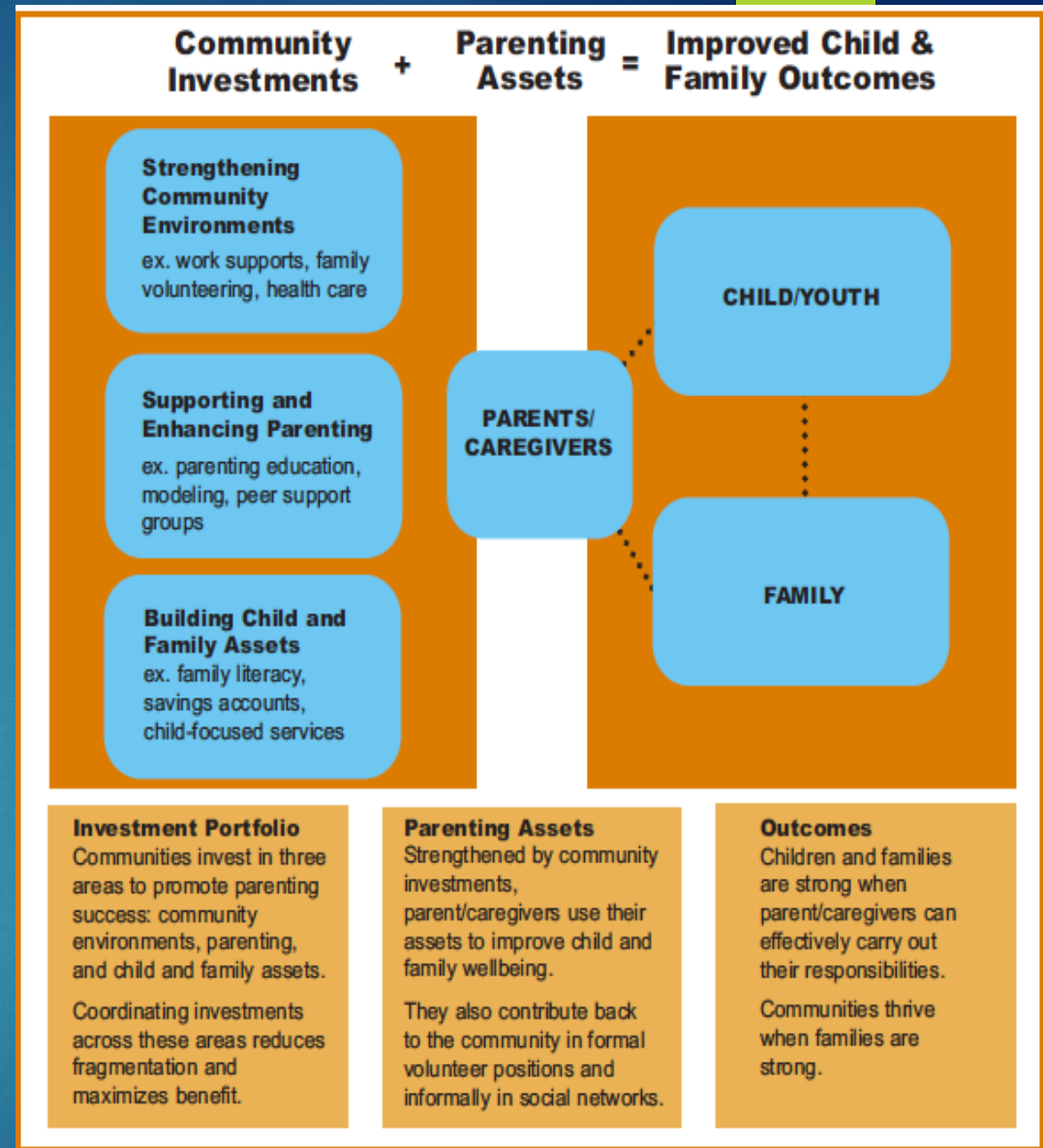
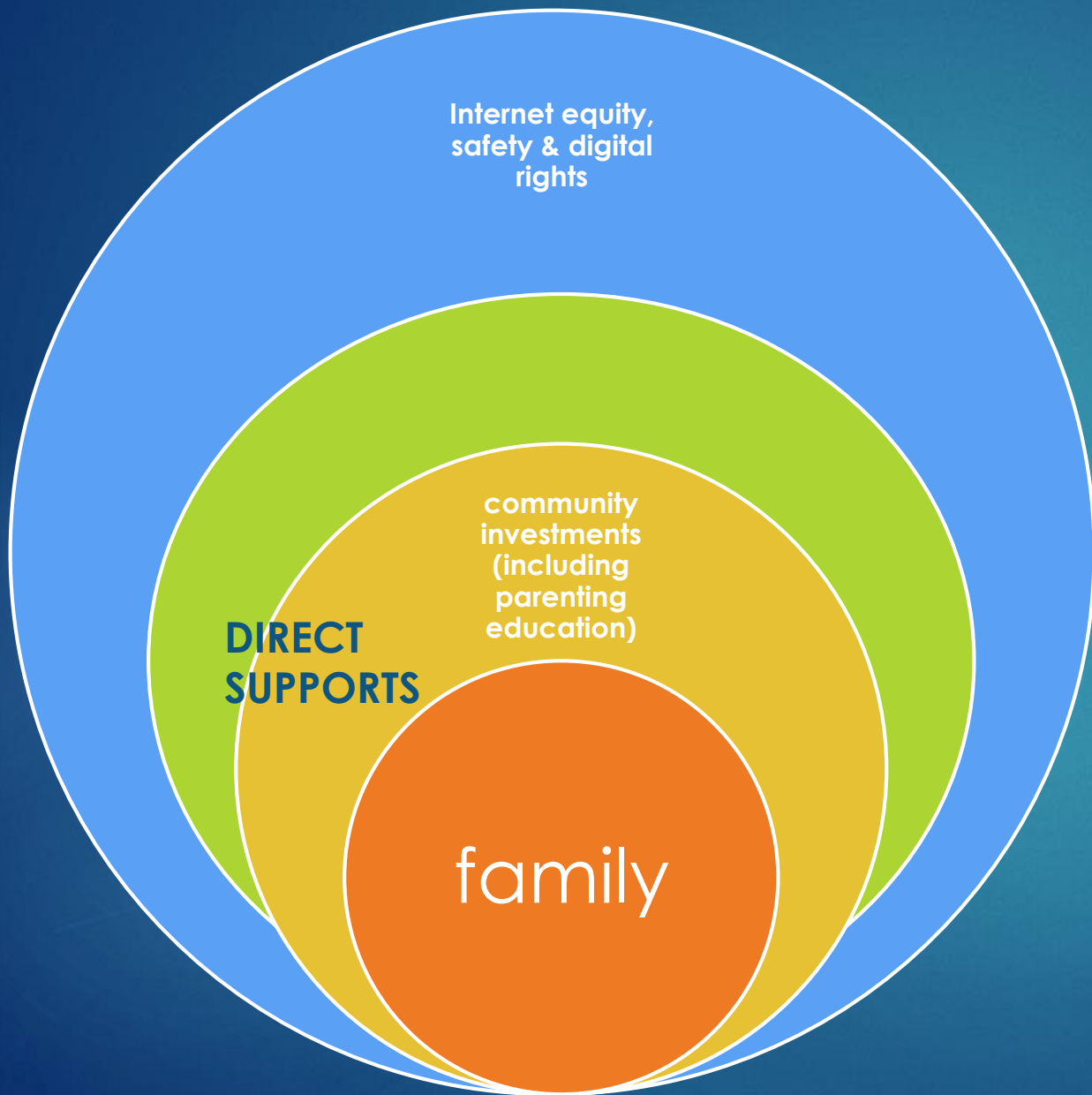
\*Demerouti, Derks, Lieke & Bakker (2014)





UN DESA May 14, 20





From Family Strengthening Policy Center (2007).  
The Parenting Initiative: Investing in Parents so  
Children & Youth Succeed.

# The paradox of technology and the need to develop 'digital cultural capital' (Ollier-Malaterre, et al, 2019\*)

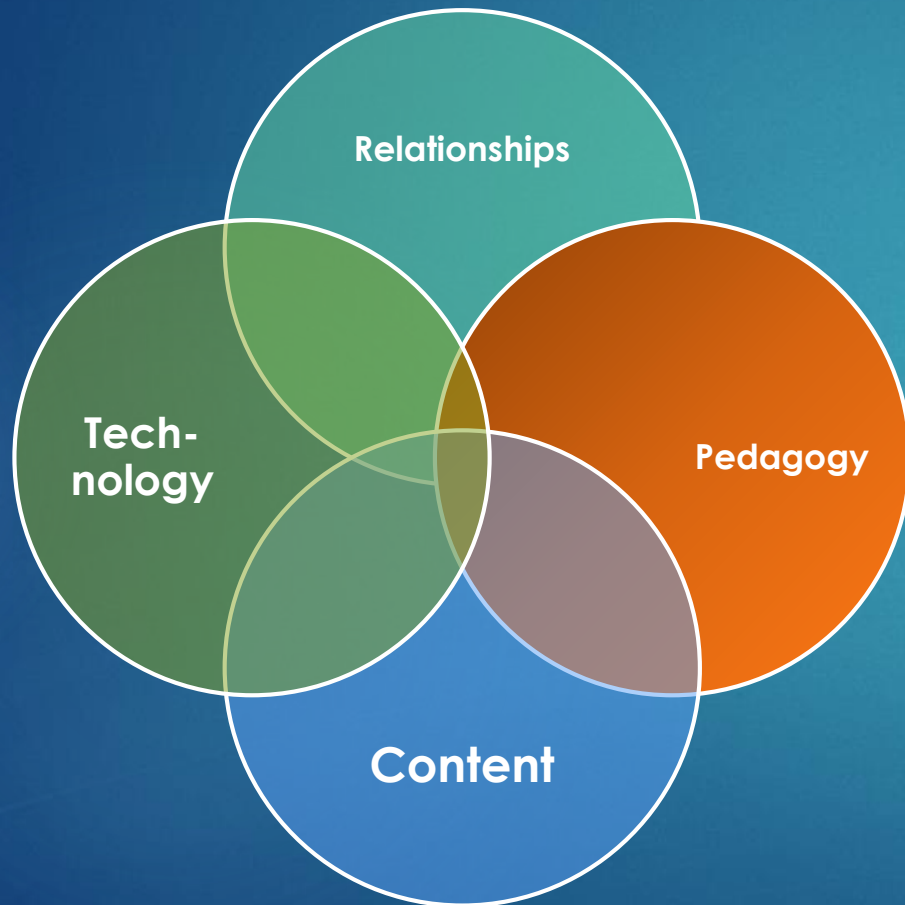


*... This porousness [or permeability of boundary] in turn makes the management of connectivity, online self-presentation, and privacy more challenging and calls for more elaborate technology management. (p. 426).*

**'Digital cultural capital:'** the awareness, motivation and skill to perform technology *boundary management.*

\*Ollier-Malaterre, A., Jacobs, J. A., and Rothbard, N. P. (2019). Technology, work, and family: Digital cultural capital and boundary management. *Annual Review of Sociology*, 425-447.

# Parenting Education in our Digital Age

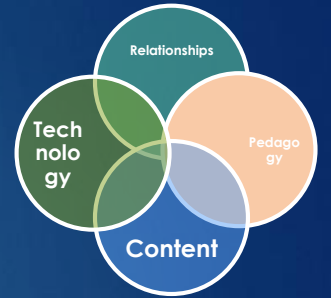


*“Parents should also be encouraged by providers and educators to help frame a **child’s relationship to digital media**, discussing online etiquette, empathy, ethics, internet safety, personal boundaries, and how to regulate their own media habits. (Coyne, et al, 2017; S115).”*

***What matters is not only what advice is provided for parents but also how it is provided. ... it should be timely, ..it should reach parents from all walks of life, in the languages that they and their children speak at home. Relatedly, it should be transparent to parents how digital services engage with their children, ..and what parents can do if they consider there’s a problem or injustice. (Livingstone, 2021)***

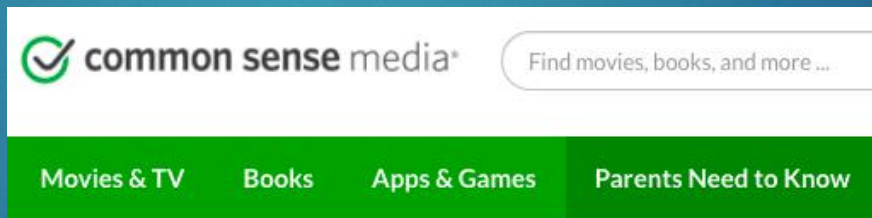
# Technology + relationships as content in parenting education

- ▶ The importance of interacting with a young child who is using an iPad
- ▶ Communicating with a school-age child about the responsibilities of owning and using a smartphone
- ▶ Being there for a child who is bullied online and needs a sense of security
- ▶ Holding a family discussion about shared limits on screens at the dinner table – for everyone
- ▶ Empowering parents to advocate for transparent school policies on software in ways that involve children's voices



# Sample content aids on media literacy

Chile Ministry of Education, Center for Education & Technology



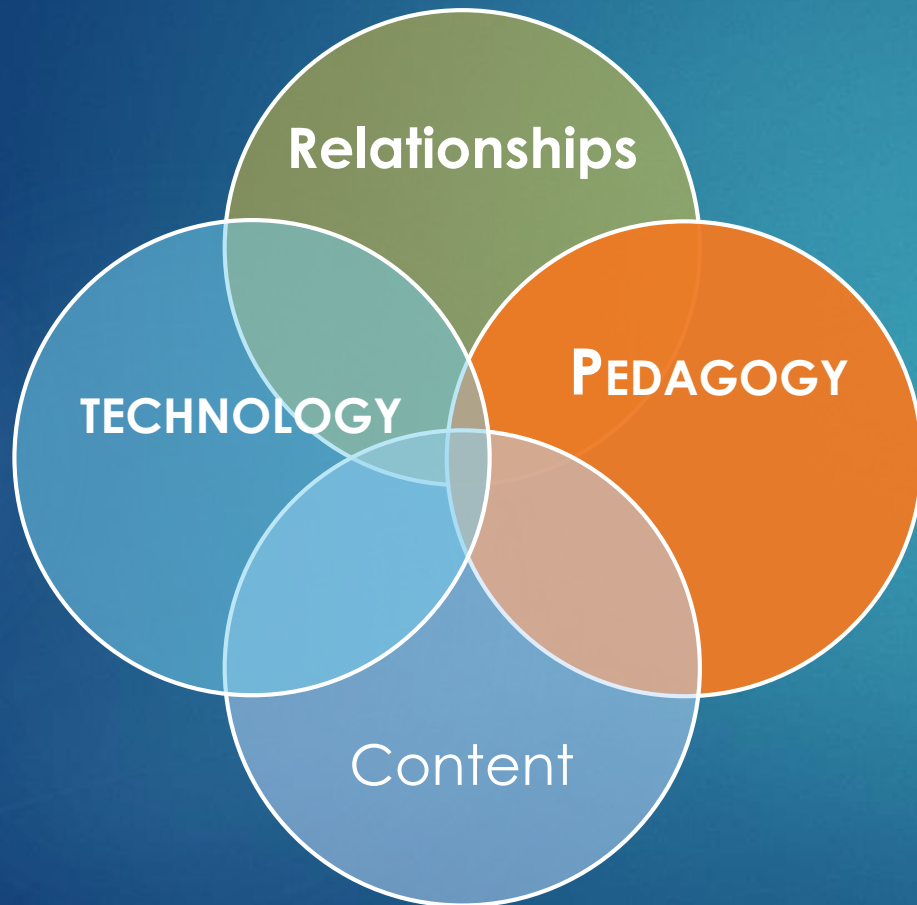
## Facebook, Instagram, and Social



Singapore Media Literacy Council

2020 Council of Europe Easy steps to help your child become a Digital Citizen

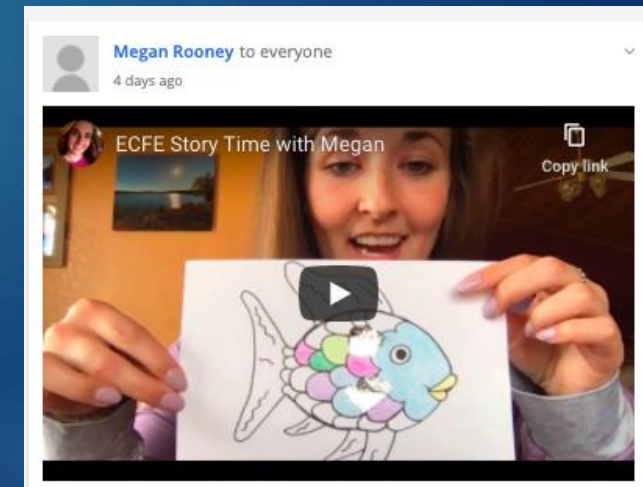
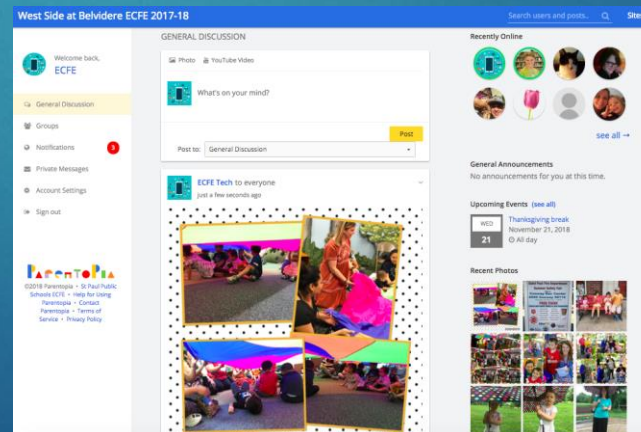
# Technology-Integrated Parenting Education Delivery



## Mandatory On-line Parenting Education Class

Center for Divorce Education's  
**CHILDREN IN BETWEEN**  
(Formerly: Children in the Middle Online)

▶ A Co-Parenting Program for Divorcing Parents



# And yet: Decentralized preparation and support

- ▶ Family education often adheres to individualized standards of preparation and of practice, or trained to a specific curriculum or model. (US, NPEN.org)
- ▶ Unlike more unified professions (e.g., social work, teachers, therapists) there are few guidelines or work requirements specific to technology competence.
- ▶ The majority (75%) of family educators report that their knowledge about technology and use of tech is learned 'on their own.' (Walker, 2019). Many report using their own devices for work.



# Technology Integration Standards

## Family Life Educator standards

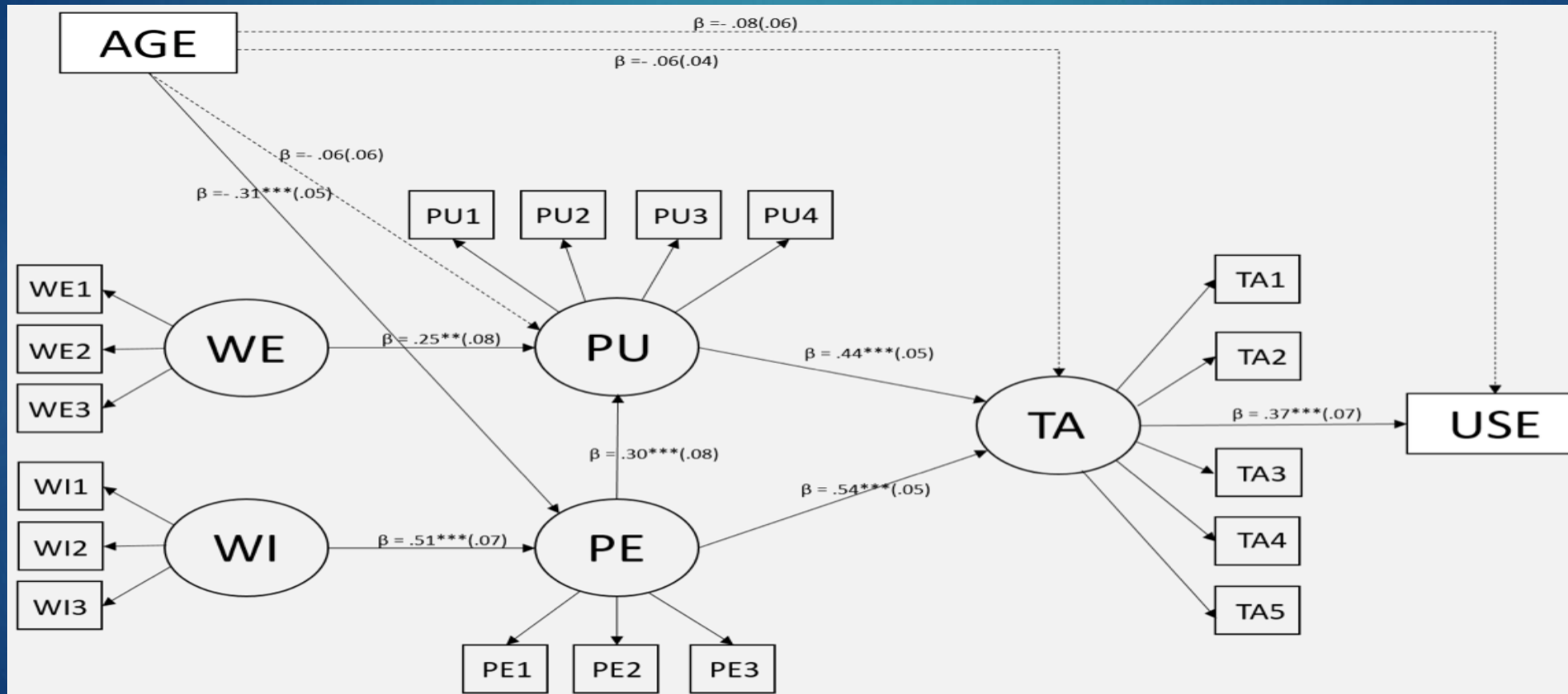
“Employ techniques and technologies to promote application of information in the learner's environment” (NCFR, 2014) [1 of 11 practice competencies].

## Standards for all teachers from the MN Board of Teaching

- Tech requirements of all educators:
- Student learning (personalized learning, learning differences)
- Technology-enriched learning environments
- Diverse learning
- Assessment (using technology in student assessment)
- Discrimination (equity issues and technology)
- Technological knowledge
- Digital citizenship
- Contribution to the teaching profession
- Broadening student knowledge about technology
- Variety of technologies

NOTE: Technology standards of practice in fields such as social work and counseling are very extensive, though less focused on content.

# Workplace conditions as direct and indirect influences on family professionals' technology attitudes and use



TAM Model applied to family professionals (Walker, et al, 2105; 2017, in press)

# Challenges to practice in the workplace

Comments from family educators faced with adapting to online formats with COVID, spring 2020

*“With so little planning time, and support for the technology available through the district, It really felt like the train left the station without [me].”*

*“At one moment, I would feel ineffective, as though I was working in a vacuum, putting material for families out into a void where it wasn’t doing anyone any good. And I felt selfish for wishing I would hear from families, knowing that they were likely stressed and overwhelmed. I struggled to know that there was anything that I was doing – to meet any real needs.”*

*“I wish that all students were able to connect and not just those that can afford to buy devices.”*

Picture taken in 2016. donated TV + VCR



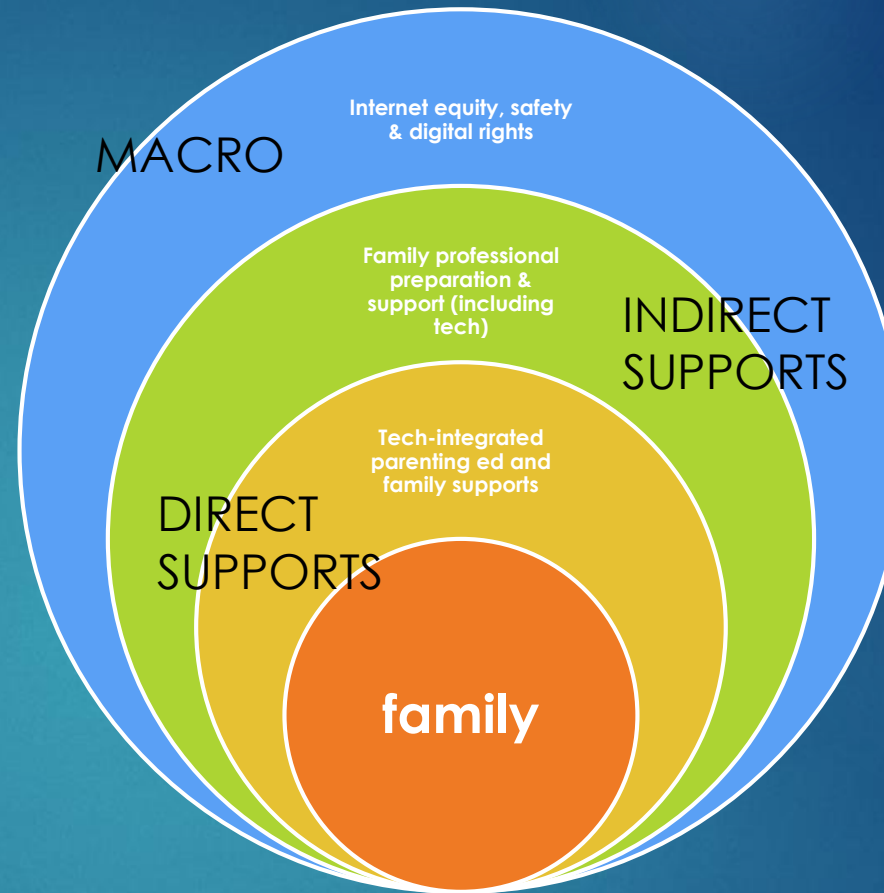
FIELD FOUNDATIONS RELATED TO TECHNOLOGY INTEGRATION	PROFESSIONAL IMPACT AREAS AND DELIVERY STRATEGIES RELATED TO TECHNOLOGY	ASPECTS OF INDIVIDUAL AND FAMILY TECHNOLOGY USE	PROCESSES AND OUTCOMES (FACILITATED BY TECHNOLOGY INVOLVEMENT)
<p>Training - preparation of professionals on the use of technology</p> <ul style="list-style-type: none"> <li>- in preservice</li> <li>- inservice</li> </ul> <p>Standards</p> <ul style="list-style-type: none"> <li>- for technology use in practice</li> </ul> <p>Maintain and promote quality research through methodology, summaries, directions</p> <p>Theoretical and conceptual models to frame research, practice and policy</p>	<p>Individual and family impact areas</p> <ul style="list-style-type: none"> <li>- as a knowledge area (to promote balanced, effective use)</li> <li>- as a skills area (to promote effective use)</li> </ul> <p>Impact strategies</p> <ul style="list-style-type: none"> <li>- technology employed as effective practice (e.g., instruction, program design, counseling)</li> </ul>	<p>User</p> <ul style="list-style-type: none"> <li>- demographics</li> <li>- tech attitude, comfort, skill</li> </ul> <p>Technology</p> <ul style="list-style-type: none"> <li>- type</li> <li>- context</li> <li>- characteristics</li> </ul> <p>Functions and purposes for technology use (e.g., communication, entertainment)</p>	<p>Individual family member development well-being</p> <p>Family well-being, satisfaction</p> <p>Individual and family processes (e.g. learning, communication, social capital, connectedness)</p> <p>Outcomes external to the individual or family (e.g., technology developed, community well-being)</p>

From Walker, S. (2016). Creating the Future We Want: A Framework for Integrated Engagement in Technology Use in Family and Consumer Sciences. *Journal of Family and Consumer Sciences*. 11, 7-17.

# Some ways to start

- ▶ Preparation: Technology as a focus in the higher education curriculum
  - ▶ Eg., FSOS 3105 Families and Technology, U of MN (3 cr).
- ▶ Online and agency Community of Practice
  - ▶ E.g., PERFECT Connections (weekly Zoom meeting of family professionals)
- ▶ Association professional development
  - ▶ Speakers, workshops, podcasts, blogs w/tech content and integration tips
- ▶ Agency determined standards of practice, inspiration, attention to workplace conditions, expectations, ethics

1. Ensure internet access (equity), safety and promote digital rights.
2. Include parenting education as a family support strategy and when addressing the range of children's outcomes.
3. Integrate technology in family services – as content, pedagogy and in maintaining relationships.
4. Provide a system of supports and standards that empower family professional ability and confidence.



**When we create an infrastructure of coordinated, sustained supports across the family ecology, then we will be doing the work that will make us 'good ancestors'**

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"This is the first! year! he has been home in the evening to help with homework. Best thing ever." by [Lost A Sock](#) is licensed under [CC BY-NC-SA 2.0](#)