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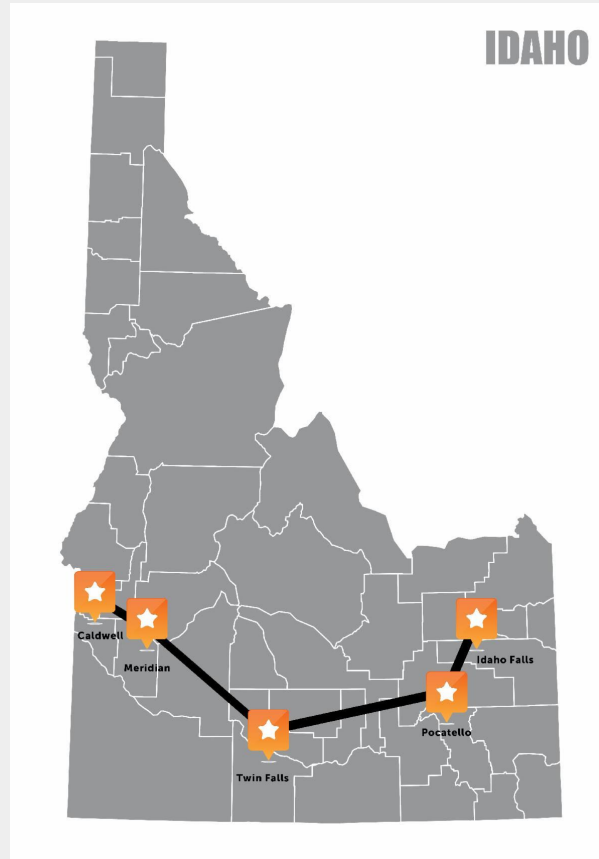
Expanding Physical Therapy Education in Idaho with the Help of Technology

Erik Talbert; Ed. D student, Educational Technology
Deanna Dye, PT, PhD; Associate Professor

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Background - Profession

What is physical therapy?



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Background - Profession

What is physical therapy?



<https://healthcarecareersguide.com/physical-therapy-history/>



<https://medgicinstruments.com/2013/12/30/just-a-cool-blog-post-with-images/>

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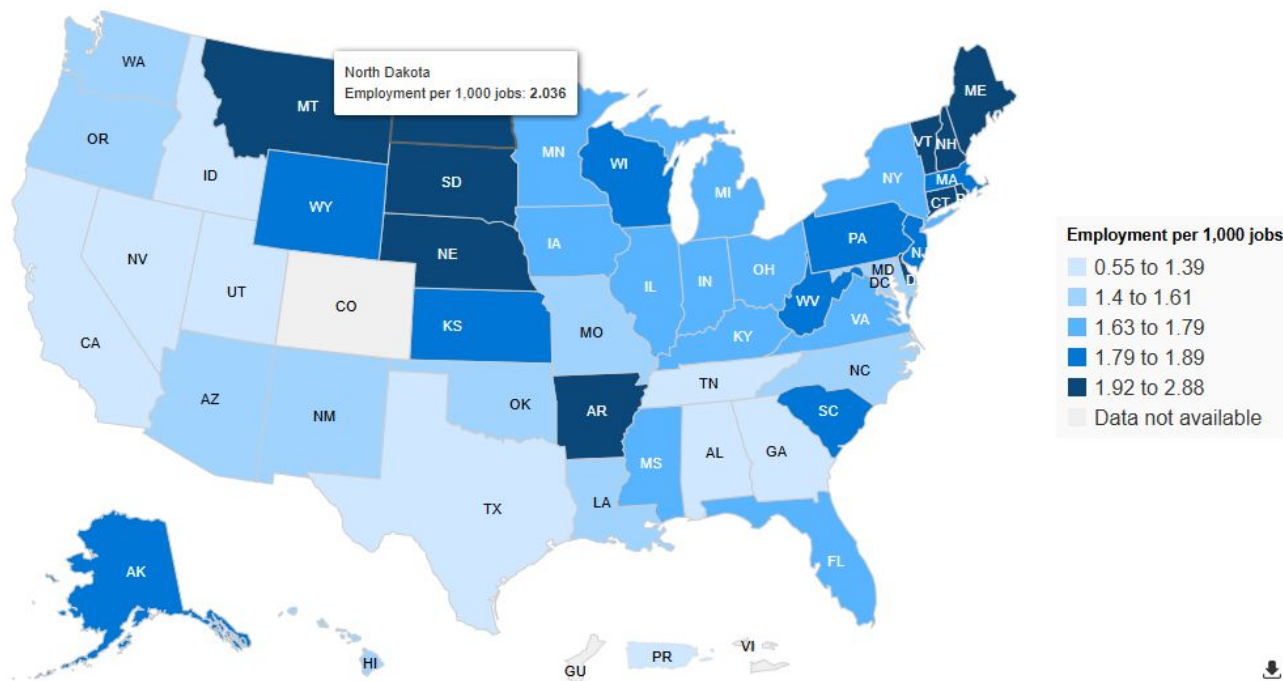


Photo Credit: Hummel Architects



High Demand - Need in Idaho

Employment per 1,000 jobs of physical therapists, by state, May 2024



- PT only offered at ISU
- PT has been in the top 10 high demand jobs for over a decade

<https://data.bls.gov/oesmap/>

Clinical
electro
+\$33.63

WAGES – 2023 APTA REPORT

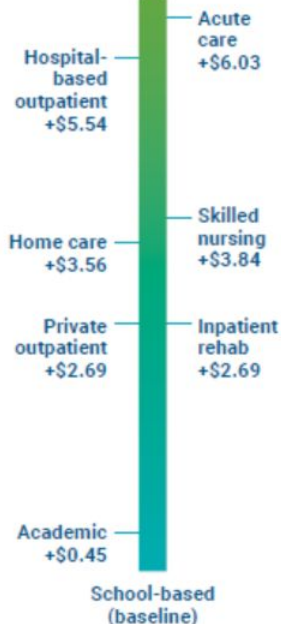
APTA; A Physical Therapy Profile: Wages Earned in the Profession, 2021-22 : A Report From the American Physical Therapy Association; July 2023

Median Gross Earned Wages of Full-Time PTs by Years of Experience

	2004	2005	2006	2008	2010	2013	2016	2021*
0-3	\$51,000	\$54,000	\$56,000	\$60,000	\$60,660	\$64,000	\$67,000	\$72,000
4-6	\$58,000	\$62,000	\$65,000	\$70,000	\$70,000	\$73,000	\$74,000	\$80,000
7-9	\$64,000	\$69,000	\$70,000	\$75,000	\$77,000	\$78,000	\$80,000	\$85,000
10-15	\$70,000	\$75,000	\$75,000	\$80,000	\$82,500	\$90,000	\$89,000	\$93,000
16+	\$75,000	\$80,000	\$80,000	\$86,000	\$90,000	\$92,000	\$96,250	\$104,000

*n values for 2021: 0-3, n = 298; 4-6, n = 487; 7-9, n = 355; 10-15, n = 452; 16+, n = 1,424.

Percentile	10%	25%	50% (Median)	75%	90%
Hourly Wage	\$ 32.65	\$ 38.80	\$ 46.98	\$ 51.65	\$ 61.94
Annual Wage (2)	\$ 67,910	\$ 80,700	\$ 97,720	\$ 107,430	\$ 128,830



<https://www.bls.gov/oes/current/oes291123.htm#ind>



High Demand - Need in Idaho

- Worked with State of Idaho oversight and budget control
- ISU Administration
 - Pocatello and Meridian coordination
 - Instructional Technology and Infrastructure
- Guessed on technology needs – had to purchase 1 year prior to installation
 - Including remodeling of the Pocatello campus
- Hiring and Training of Faculty



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With primary
population center in
the Boise area

Solution –
Technology

BUT..... COST



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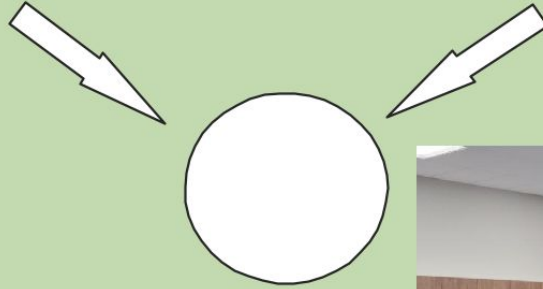


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Tech Talk

POCATELLO CLASSROOM

MERIDIAN CLASSROOM



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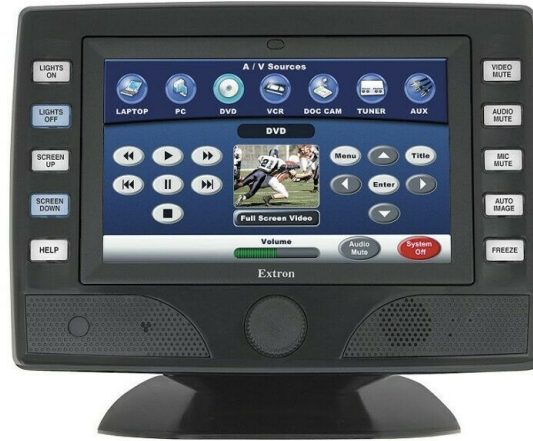
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Camera



Touch Panel



Microphones



Projector



Speakers



Monitors



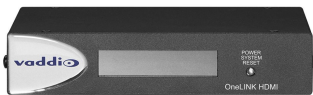
Wireless Access Point



Charging Station



Remote Controls









Vaddio Roboshot 30e

Meridian 838 | PT and x TLP Pro1022T: 10.25 x 838 Instructor x 840 Instructor x Garrison 215 | OT IV x TLP Pro 1022T: 10.25 x G215 Instructor-C1 x

← → ↻ 🏠 🔒 Not secure 10.250.96.142/#

📧 ISU Gmail 📁 ISU Directory 📁 MyISU 📁 ISU Meridian Home... 🗺️ Zoom 📊 View full spreadsheet 📄 TMS 📄 CMS 📁 Cameras 📁 Touch Panels 📁 Codecs 📁 SMPs 🗺️ Zoom ITRC Page 📄

vaddio RoboSHOT 30 HDBT 840 Instructor Rm Tel 248.434.5508

Camera
Streaming
Room Labels
Networking
Security
Diagnostics
System
Help
Logout

Color Settings
☒ Auto Iris
☐ Backlight Compensation
☒ Auto White Balance
Detail (Sharpness) 8
Chroma (Saturation) 4
Gamma -1

CCU Scenes
Custom A Custom B Custom C
Auto Incandescent Hi Fluorescent Hi
Outdoor Incandescent Lo Fluorescent Lo

Presets Reset Store
Podium CU Podium MS Classroom WS FrontDemo CU
FrontDemo CU FrontDemo MS Preset 7 Content Mon
BackDemo MS BackDemo WS Preset 11 Preset 12
Preset 13 Preset 14 Preset 15 Preset 16

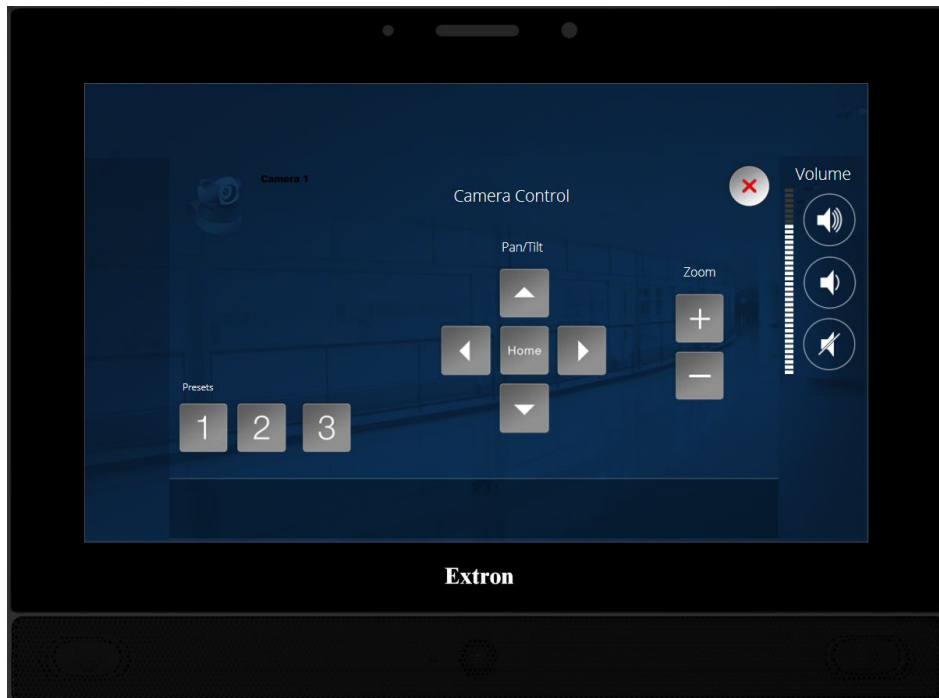
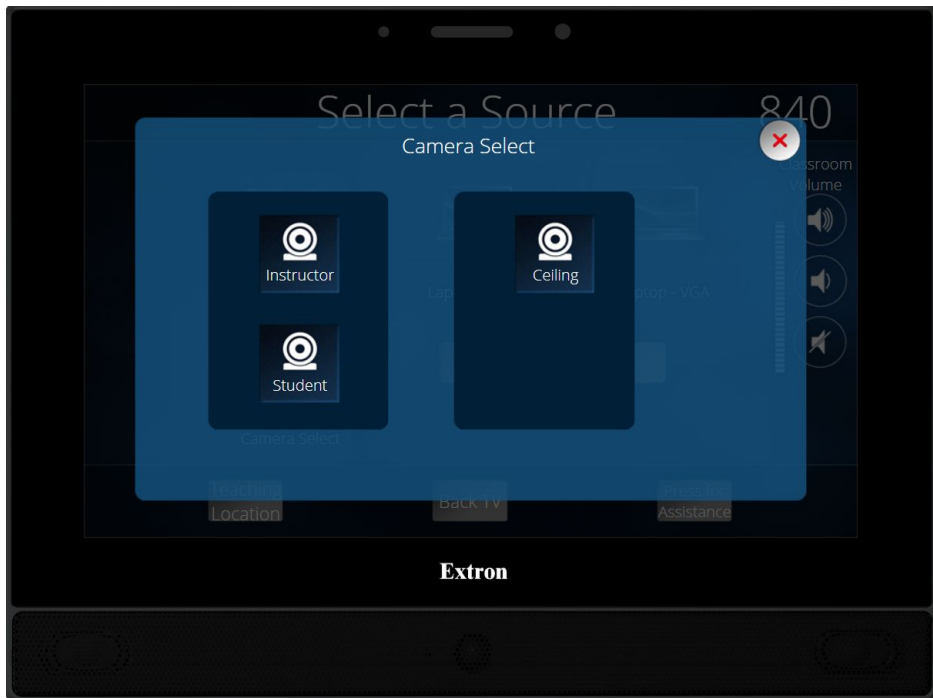
Preset Chains Reset Edit
Chain 1 Chain 2 Chain 3 Chain 4
Chain 5 Chain 6 Chain 7 Chain 8
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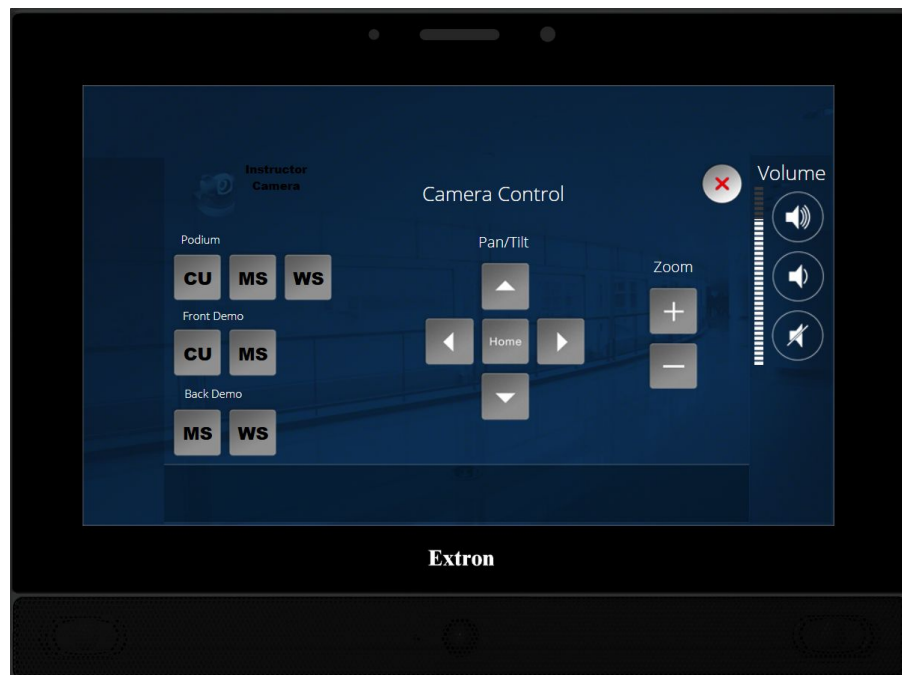
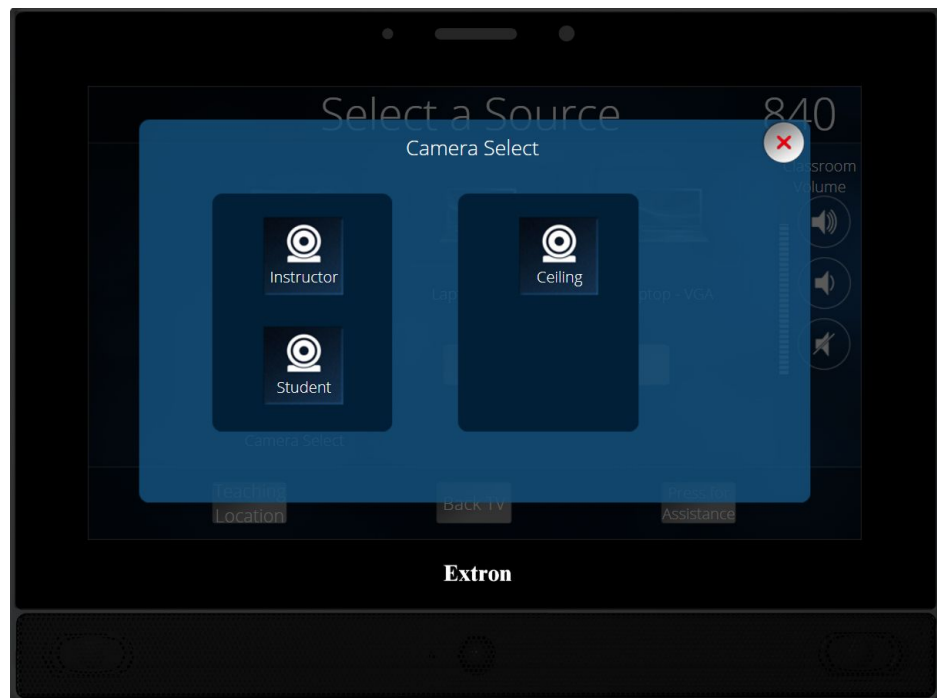
Global Preset Non-Tri-Sync Speeds
Global Pan Speed 20
Global Tilt Speed 17
Global Zoom Speed 7

Zoom
Focus... Settings...
Pan Speed 15
Tilt Speed 10
Zoom Speed 4

Camera Settings...

Windows Taskbar: Search, File Explorer, Microsoft Edge, Google Chrome, Zoom







Garrison 321 | PT Classroom



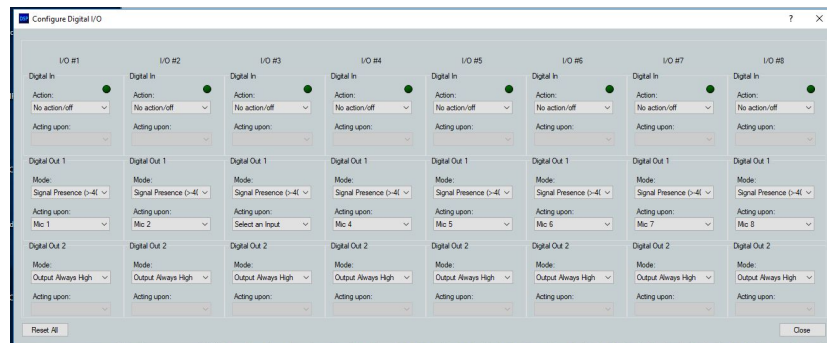
Meridian 840 | PT IVC Classroom





Frequently Accessed Software

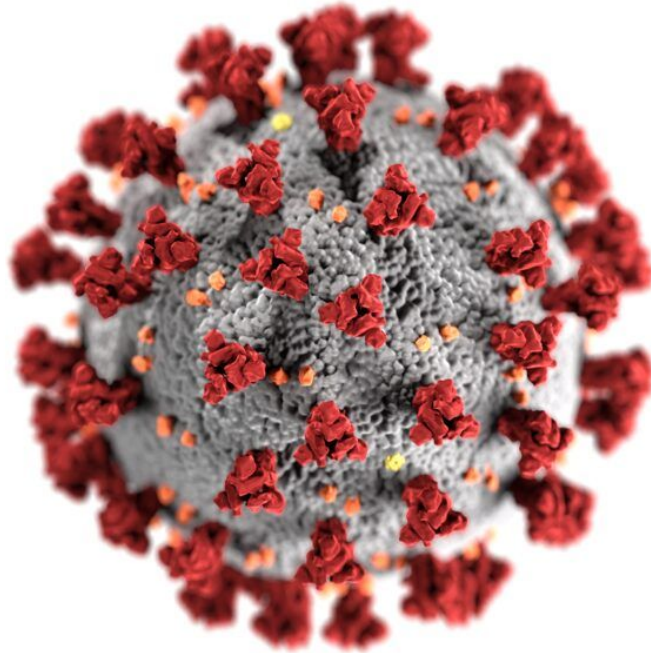
- ResSched (master resource scheduling)
- Cisco TelePresence Management Suite
- Google Calendar, Sheets
- Zoom Workplace
- Virtual camera controls
- Virtual touch panel controls
 - Extron, Logitech
- Cisco codec interface
- Extron DSP Configurator





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Friday, March 13, 2020



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December 2019 = 10 million daily users



March 2020 = more than 200 million daily users --The Verge

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"Ground Zero"



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Dr. Gerber's Research

Examined switching from synchronous videoconference delivery to hybrid.



Students:

- Technology = minimal adverse effect
- Increased stress
- More distractions

Faculty:

- Increased prep time
- Less reliance on charisma
- Decreased student interaction but better name recognition



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Pros & Cons



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Pros & Cons



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Related Research/Current Trends

- Phenomenology
- Immediacy
- Impact of decreased F2F
 - Interpersonal Skills
 - Communication
 - Clinical Skills “soft skills”



Whatuni.com

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ID Dept. of Labor “Hot Jobs”

Idaho's 10 Hottest Jobs 2012-2022

SOC Code	Occupation	Total Jobs 2012	New Jobs by 2022	Annual Growth Rate	Annual New Openings	Annual Replacement Openings	Median Hourly Wage
29-1051	Pharmacists	1,332	431	2.8%	43	32	\$53.82
29-1141	Registered Nurses	12,376	2,376	2.4%	224	238	\$28.36
29-1123	Physical Therapists	1,142	360	2.8%	36	28	\$37.43
15-1132	Software Developers, Applications	1,732	385	2.0%	38	22	\$33.62
29-1071	Physician Assistants	676	223	2.9%	22	12	\$42.38
49-9041	Industrial Machinery Mechanics	1,788	548	2.7%	55	52	\$22.39
47-2111	Electricians	2,902	844	2.6%	84	55	\$21.21
29-2021	Dental Hygienists	1,116	241	2.0%	24	29	\$35.02
13-1161	Market Research Analysts and Marketing Specialists	1,485	474	2.8%	47	20	\$24.31
29-1171	Nurse Practitioners	556	167	2.7%	17	11	\$42.71

Source: Idaho Department of Labor

IDAHO'S HOT JOBS - 2020-2030

IDAHO
DEPT. OF LABOR

HOT JOBS are those that on average rank high in three major criteria — abundance of jobs in the economy, jobs that are growing the fastest and jobs with the highest pay. For more detailed information on the rankings and occupational data, including a list of the Top 100 Idaho “Hot Jobs,” visit our website at www.lmi.idaho.gov.

Rank	Occupation / Required Degree	Annual Growth (# of Jobs)	Growth Rate	Median Wage
1	CONSTRUCTION MANAGERS Bachelor's degree	943	35.4%	\$37.05
2	1ST-LINE SUPERVISORS OF CONSTRUCTION, TRADES & EXTRACTION WORKERS High school diploma or equivalent	1,755	39.0%	\$28.91
3	HAZARDOUS MATERIALS REMOVAL WORKERS High school diploma or equivalent	327	46.8%	\$17.89
4	DENTAL HYGIENISTS Associate degree	561	27.4%	\$37.24
5	COST ESTIMATORS Bachelor's degree	476	34.7%	\$29.64
6	ELECTRICIANS High school diploma or equivalent	1,629	31.4%	\$23.28
7	REGISTERED NURSES Bachelor's degree	2,050	19.9%	\$36.32
8	ENVIRONMENTAL ENGINEERS Bachelor's degree	174	34.7%	\$48.13
9	PHYSICAL THERAPISTS Doctoral or professional degree	427	24.1%	\$38.63
10	SALES ENGINEERS Bachelor's degree	99	35.5%	\$47.65



Instructor Perspective

- Split personality
- Zoom may be an equalizer ... But – Students split as well
- More faculty in the program
 - Specialization / Expertise
- Takes thoughtful planning to do well

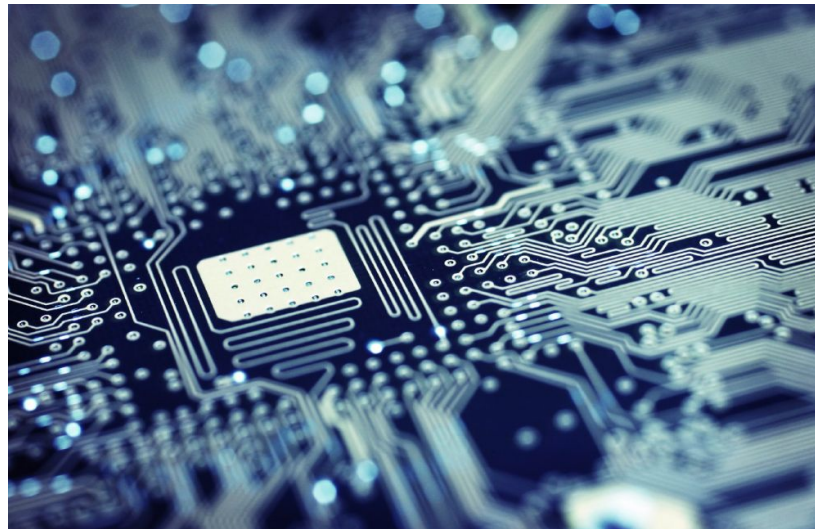


<https://www.flickr.com/photos/id-iom/9465345000>



Key Learning

- Technology is a tool
- TIME - must be scheduled
 - to prepare lessons
 - to train instructors, students
 - to coordinate before, during, after
 - to use *intentionally*



<https://www.flickr.com/photos/92334668@N07/11123530043>



Key Learning

- Zoom Room Underutilized Features
 - AI Summaries, BO Rooms, Chat, Whiteboards
- Selective use
 - Determine what mode of attendance and why
 - Be consistent for fairness among instructors and courses
- Telehealth / AI health –
 - Greater health inequity gap??



Key Learning

- Body of evidence in educational technology consistently suggest *no significant difference* between traditional modes of education and tech mediated modes in regard to **student outcomes**.
 - see Thomas Russell *The no significant difference Difference Phenomenon*
 - detaresearch.org
 - There are exceptions



Key Learning

However...

- Undeniable that our embodied experience is altered with technology-mediated education
 - Perception, thoughts, actions
 - How we *feel* about an experience
- In turn, this affects
 - Student/teacher satisfaction, retention
 - Engagement, career readiness, social skills

Worth Studying, Addressing!



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Thank You!

We invite your questions.

Please come tour ISU Meridian with NWMET!

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