

Joint Commission on Technology and Science

- **Review: Open Education**
- Update: State Intellectual Property Policy Workgroup
- Review: Extended Producer Responsibility Laws
- Update: Electronics Recycling

What is Open Education?

- ❑ Open education is a movement that embraces the use of free and low cost materials developed by a community of people for use in an educational setting.
- ❑ Open education resources are predominantly electronic resources accessed on the Internet. In many cases these materials can be printed on-demand.

Benefits of Open Education

- Greater use of open education resources can reduce the costs of textbooks to local school divisions across the Commonwealth.
- Greater use of open education resources can increase the capability of schools and teachers to provide innovative content and enrich the learning experience.

Challenges Facing Open Education

- ❑ Stringent SOL requirements and quality control
- ❑ Dynamic nature of the open education materials; continually developing content
- ❑ Dependent on access to computers, internet, and/or print on demand technologies (POD)
- ❑ Resistance by teachers and parents to replace traditional textbooks
- ❑ Balancing the “openness” of open education resources while protecting intellectual property rights
- ❑ Confusion over IP issues

Virginia Timeline

- ❑ Summer 2007: JCOTS formed the Open Education Subcommittee.
- ❑ Session 2008: JCOTS recommended legislation to redefine “textbook” as a print or electronic medium.
- ❑ Summer 2008: JCOTS Open Education Subcommittee continued to meet.
- ❑ Session 2009: JCOTS recommended two bills:
 - Required Sect. of Administration to update the state IP policy and authorize the use of Creative Commons licenses.
 - Established a framework for creating Open Education Resource Centers at community colleges (needs appropriation or private donation by July 1, 2010 to become effective).

Virginia Timeline

- Spring 2009- Sect. of Technology (Chopra) completes a Physics “Flexbook” in partnership with CK-12, a non profit.
- Fall 2009- Sect. of Administration forms workgroup to draft IP policy for state employees.
- December 2, 2009- Sect. of Administration to report new IP policy to JCOTS

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Copyright/IP Workgroup

- HB 1941/SB 1174 directed the Sect. of Administration, in consultation with the Sect. of Technology, to develop a state IP policy.
- Members:
 - Sect. of Administration/ Deputy Sect.
 - Sect. of Technology/ Deputy Sect.
 - Two attorneys with specialties in IP and Education Law
 - Representatives from VDOT and DOE
 - JCOTS Staff Attorney

Copyright/IP Workgroup

□ Requirements:

- A policy granting state agencies the authority over the protection and release of patents and copyrights created by employees of the agency. Such policy shall authorize the use of Creative Commons or Open Source Initiative licensing.
- A provision authorizing state agencies to seek patent protection only in those instances where the agency reasonably determines the patent has significant commercial value. The responsible state agency shall file with the Secretary a summary of the expected commercial value of the patent.
- A procedure authorizing state agencies to license or transfer to a state employee any interest in potentially patentable material developed by that employee during work hours.
- A procedure authorizing state agencies to license or transfer to a private entity any interest in potentially patentable material developed by that agency.

Issues with State-Generated IP

- ❑ Very little guidance is provided to state agencies regarding the protection and use of IP (copyrights and patents)
- ❑ Executive Memorandum from 1994 is still in effect, but not readily available
- ❑ Balancing the Commonwealth's responsibility to its citizen taxpayers (financial vs. social ROI)
- ❑ Automatic copyright on all works (federal law) limit flexibility for users of state IP

Deliverables...

- ❑ **Cover Sheet:** Broad policy objectives of the Commonwealth
- ❑ **Form:** Used by state employees in evaluating IP
- ❑ **Guidelines:** Supports the form and provide insight and background material for agency heads and employees
- ❑ **Report:** List of potential legislative and executive issues that could be addressed to improve/strengthen the policy and guidelines

Unresolved Issues With IP Policy

- Apparent that further legislative changes could be made to strengthen and clarify the law
 - Guideline vs. policy (regulation/APA)
- How to differentiate between “high-value” and “low-value” IP, financial vs. social value
- Need to organize high-value IP once protection is sought...IP “yard sale”?
- Existing Executive Memorandum (1994) is still in effect and trumps guideline.
- Educating executive agencies regarding the policy/guidelines

Questions?



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Extended Producer Responsibility (EPR)

- The EPR model is becoming one of the preferred models for state laws addressing the recycling, recovery, and disposal of household hazardous materials.
 - Carpet
 - **Electronics**
 - Fluorescent Lighting
 - Gas Cylinders
 - Medical Sharps
 - Mercury Products
 - Paint
 - Pesticides
 - Pharmaceuticals
 - Phone Books
 - Radioactive Devices
 - Thermostats
 - Tires

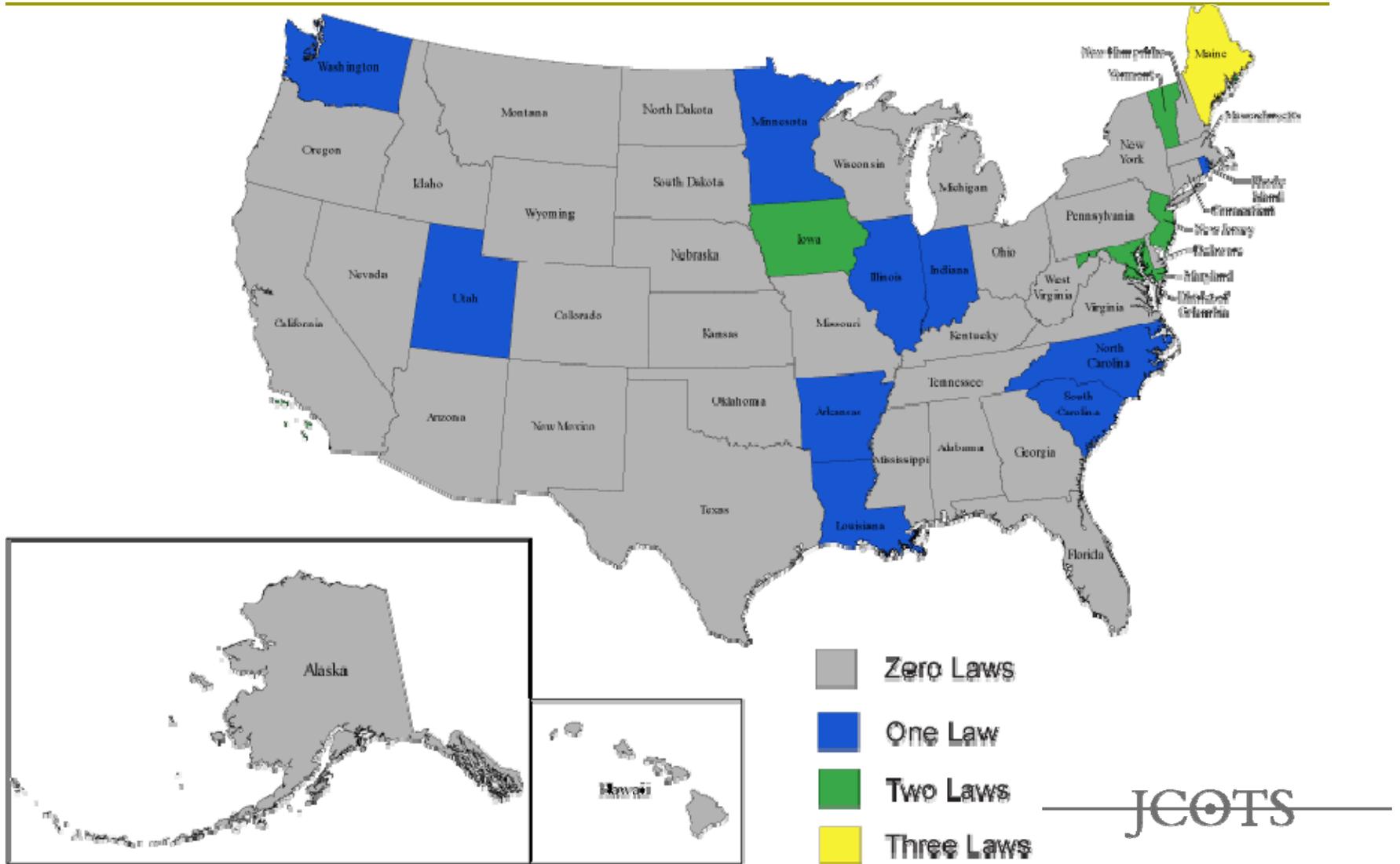
Other Models for Recycling/Disposal

- Advanced Recovery Fees (consumer funded)
 - Tires
 - Bottles
- Sales Bans
 - Mercury-Added Products
- Landfill Ban and MSW Ban
 - Batteries
 - Cathode Ray-Tubes (CRT)
 - Paints
- Municipal Programs (litter tax funded)
 - Newspaper, glass, plastic, aluminum, etc.

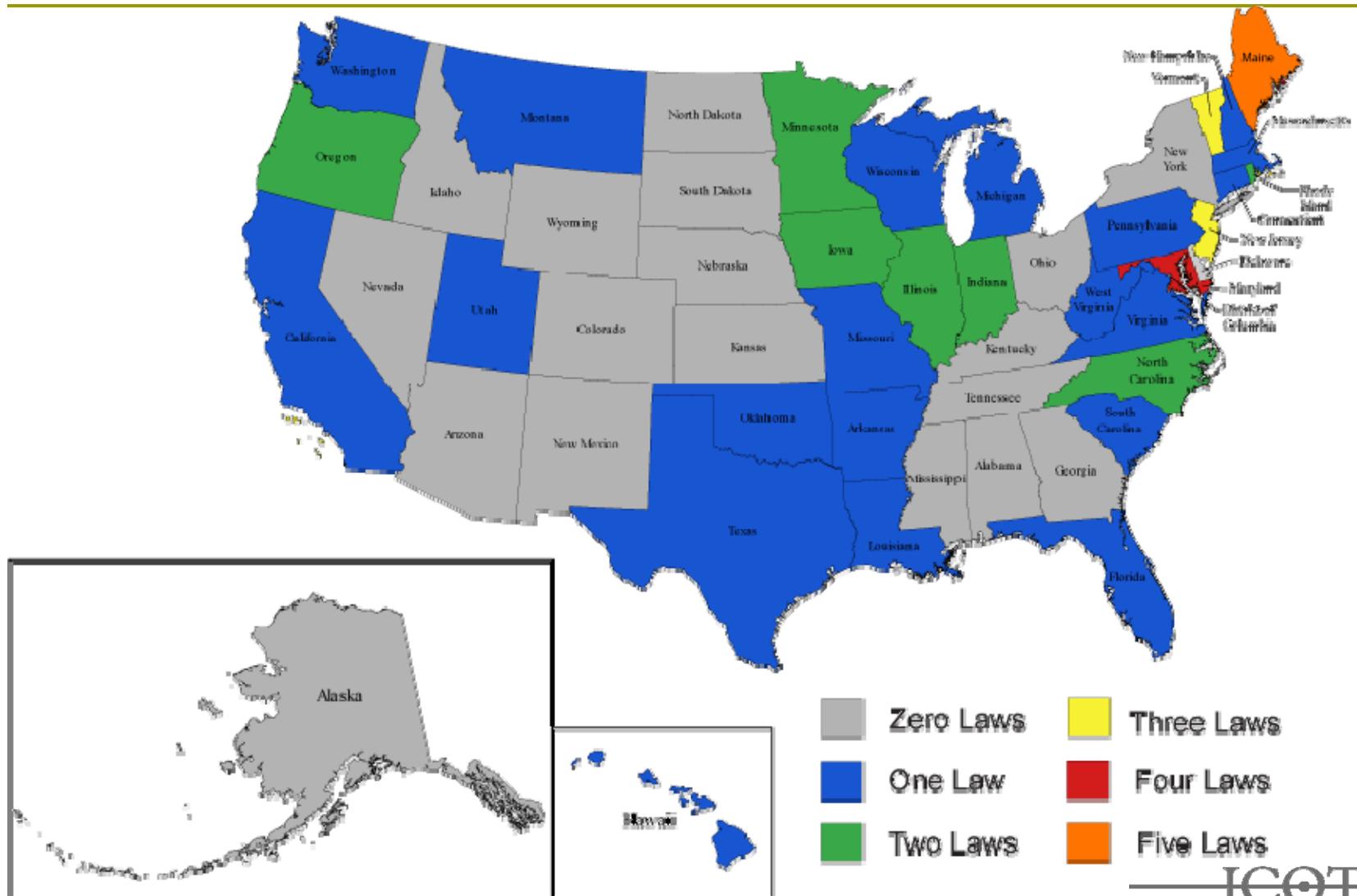
Product Stewardship Institute (PSI)

- ❑ PSI is a national non-profit membership-based organization that works with state and local government agencies to partner with manufacturers, retailers, environmental groups, federal agencies, and other key stakeholders to reduce the health and environmental impacts of consumer products.
- ❑ Virginia is one of five states that is not a full (paid) or affiliate (unpaid) member.
- ❑ Affiliate membership is achieved by the environmental agency head sending a one-page letter to PSI requesting membership.

2006: Extended Producer Responsibility (EPR)



2009: Extended Producer Responsibility (EPR)



Principles of Product Stewardship

- Responsibility
 - The responsibility for reducing product impacts should be shared among industry, government, and consumers.
- Internalize Costs
 - All product lifecycle costs should be included in the total product cost.
- Incentives for Cleaner Products and Sustainable Management Practices
 - Policies that promote and implement product stewardship principles should create incentives for the manufacturer of “cleaner” products.
- Flexible Management Strategies
 - Industry is in the best position to determine the most cost effective mean of achieving goal-oriented results.
- Roles and Relationships
 - Industry and government will both need to provide leadership.

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Electronics Recycling in Virginia

- Computer Recovery and Recycling Act
 - Passed in 2008, became effective July 1, 2009
 - EPR model
 - Requires manufacturers to adopt and implement a recovery plan that provides for the reasonably convenient collection, recycling, and reuse of computer equipment returned by a consumer in the Commonwealth
 - Manufacturers are required to report on the number of computers collected by January 31st of every year

- DEQ has a page on its website dedicated to eCycling
 - <http://www.deq.virginia.gov/ecycling/homepage.html>

Electronics Recycling in Virginia

❑ Retailer Recycling Programs

- Best Buy
 - ❑ Two items per day (smaller items unlimited)
 - ❑ \$10 cost for some items, Best Buy compensates with a \$10 gift card
- Office Depot
 - ❑ Small (\$5), medium (\$10), and large (\$15) boxes
- Goodwill (partner with Dell)
 - ❑ Available in most VA stores
- Home Depot
 - ❑ Compact fluorescent bulbs (CFL) and batteries
- IKEA
 - ❑ CFL

❑ Manufacturer

- Dell offers free shipping and pick-up from customer home for Dell computers

❑ Local Recycling Options

- Annual, semi-annual, and monthly events

Questions?

