# Software ed Estensioni per Accessibilità

# Screen reader (lettori schermo) e Sintesi vocale

#### **NVDA (NonVisual Desktop Access)**

- **Download**: https://www.nvaccess.org/download/
- **Licenza**: Gratuito, open source
- Compatibilità: Windows 7, 8, 10, 11
- Uso per demo: Configurare voce italiana, velocità 50% per pubblico
- Shortcuts essenziali:
  - H = Naviga per headings
  - T = Naviga per tabelle
  - G = Naviga per immagini
  - Ctrl = Stop lettura

### JAWS (Job Access With Speech)

- **Download**: https://www.freedomscientific.com/products/software/jaws/
- **Licenza**: Commerciale (~2000€), trial 40 min
- **Pro**: Standard de facto professionale
- Contro: Costoso, per demo meglio NVDA

#### Windows Narrator (Assistente Vocale)

- Attivazione: Win + Ctrl + Enter
- **Pro**: Preinstallato, integrazione sistema
- Uso: Test rapido compatibilità Windows native

### Verifica accessibilità

#### **WebAim Contrast Checker**

- **URL**: https://webaim.org/resources/contrastchecker/
- Uso: Verifica rapida contrasto colori (WCAG AA: 4.5:1)
- Feature: Input hex codes o color picker

#### **Adobe Acrobat Pro**

- Funzione: Accessibility Checker integrato
- **Path**: Tools > Accessibility > Full Check
- **Output**: Report dettagliato con fix suggestions
- Essential: Per validazione PDF finali

#### **WAVE Browser Extension**

• **Chrome**: https://chrome.google.com/webstore/detail/wave-evaluation-tool/

- **Firefox**: https://addons.mozilla.org/firefox/addon/wave-accessibility-evaluation/
- **Uso**: Analisi real-time pagine web
- Visual: Overlay con errori evidenziati

#### axe DevTools

- Chrome: https://chrome.google.com/webstore/detail/axe-devtools-web-accessibility/
- Edge: Disponibile in Microsoft Store
- **Pro**: Automated + guided testing
- **Report**: Esportabile per documentation

# Simulatori di tipi di disabilità

### **Color Oracle**

- Download: https://colororacle.org/
- **Funzione**: Simula daltonismo (Deuteranopia, Protanopia, Tritanopia)
- **Compatibilità**: Windows 10/11
- Uso: Overlay full-screen real-time

### **NoCoffee Vision Simulator (Chrome)**

- Extension: https://chrome.google.com/webstore/detail/nocoffee/
- **Simula**: Vari tipi di ipovisione
- Settings: Blur, contrast, brightness, field loss
- **Demo perfect**: Per showing impact su esempi PDF

### Funkify (Chrome/Edge)

- **Extension**: https://www.funkify.org/
- Simula: 8 diverse disabilità incluso DSA
- Scenarios: Dyslexia, low vision, motor impairments
- **Trial**: Gratuito limitato, subscription per full features

## Strumenti di creazione contenuti

## Microsoft Word - Accessibility Checker

- **Attivazione**: Review tab > Check Accessibility
- **Real-time**: Mantieni panel aperto durante editing
- Auto-fix: Suggestions per alt-text, headings, contrasto

### **MathType**

- **Download**: https://www.wiris.com/en/mathtype/
- Integrazione: Word, PowerPoint, Google Docs
- Accessibilità: Genera MathML + descrizioni verbali
- Alternative gratuita: Microsoft Equation Editor built-in

### **Immersive Reader (Microsoft)**

- **Integrazione**: Word, Edge, Office 365
- **Features**: Read aloud, syllable breaks, picture dictionary
- **Demo**: Perfetto per mostrare DSA support

# Estensioni per browser

### Read&Write (Chrome)

- **Download**: https://chrome.google.com/webstore/detail/readwrite-for-google-chrome/
- Features: Text-to-speech, dictionary, screenshot reader
- **Free version**: Limitata ma sufficiente per demo
- **Demo**: OCR su screenshot PDF inaccessibili

### Mercury Reader (Chrome/Firefox)

- **Funzione**: Cleanup pagine web per readability
- Benefit: Rimuove distrazioni, migliora focus
- Use case: Simulare reading preferences DSA

### Dark Reader (Chrome/Firefox/Edge)

- Extension: Automatic dark mode
- Accessibility: Riduce affaticamento visivo
- Custom: Contrasto, brightness, grayscale adjustments

# **OpenDyslexic Font Extension**

- **Chrome:** https://chrome.google.com/webstore/detail/opendyslexic-font-for-chrome/
- Funzione: Sostituisce font con OpenDyslexic
- **Demo**: Before/after su testo denso

# LaTeX e Matematica Accessibile

### MiKTeX (Windows LaTeX Distribution)

- **Download**: https://miktex.org/download
- Packages necessari: accsupp, pdfcomment, axessibility
- Output: PDF con layer accessibili per screen readers

#### TeXstudio (LaTeX Editor)

- Download: https://www.texstudio.org/
- **Integration**: Preview real-time + package management
- Accessibility plugins: Auto-suggestions per alt-text math

### MathJax (Web)

- **URL**: https://www.mathjax.org/
- Funzione: Rendering math accessibile nei browser

• Output: Screen reader compatible math

### Strumenti di Utilità

### **High Contrast Themes**

• **Attivazione**: Settings > Ease of Access > High Contrast

• **Themes**: High Contrast Black, White, #1, #2

• **Demo**: Mostrare impact su interface universitarie

### Magnifier (Lente di ingrandimento)

• Shortcut: Win + Plus

• Modes: Fullscreen, lens, docked

• **Zoom**: 100% to 1600%

• **Demo**: Simulare low vision su PDF

### **On-Screen Keyboard**

• **Attivazione**: Settings > Ease of Access > Keyboard

• Uso: Simula motor impairments

• **Features**: Click-to-type, hover-to-select

# Strumenti di testing

# **Quick Check Routine (5 minuti)**

1. **NVDA test**: Tab navigation + heading jumps

2. **Contrast check**: WebAim su colori principali

3. Color Oracle: Verifica daltonismo

4. **Zoom test**: 200% magnification readability

5. **High contrast**: Windows theme switch

### **Deep Validation (15 minuti)**

1. Adobe Acrobat: Full accessibility check

2. **WAVE extension**: Complete page analysis

3. **Multiple screen readers**: NVDA + Narrator comparison

4. **Mobile simulation**: Responsive + voice control

5. **Print preview**: Structure verification

### **Emergency Fixes Toolkit**

• **Font replacement**: Arial/Verdana ready

• Color adjustments: High contrast palette

• Alt-text templates: Math, chemistry, diagrams standard descriptions

• **Structure markup**: H1-H6 hierarchy templates

• Table alternatives: List-based layouts ready

### INSTALLATION PRIORITY

### **Essential (Demo critical)**

- 1. NVDA Primary screen reader
- 2. WebAim Contrast Checker Bookmarked
- 3. **Color Oracle** Vision simulation
- 4. Adobe Acrobat Pro PDF validation

### **Important (Demo enhancement)**

- 5. **WAVE extension -** Web analysis
- 6. Immersive Reader DSA demo
- 7. **High Contrast themes -** Windows setup
- 8. NoCoffee simulator Browser vision sim

### **Optional (Advanced demos)**

- 9. MathType Math accessibility
- 10.Read&Write Chrome enhancement
- 11.axe DevTools Professional validation
- 12.MiKTeX LaTeX accessibility

### **BACKUP CONTINGENCY**

#### Offline alternatives

- **NVDA portable**: USB version for backup laptop
- **Screenshot tools**: Pre-captured contrast examples
- Video recordings: Key demos pre-recorded
- **PDF examples**: Embedded in PowerPoint as fallback

### **Network-free options**

- Windows built-in: Narrator, Magnifier, High Contrast
- Offline validators: Adobe Acrobat Pro check
- Local simulation: Color Oracle, NoCoffee cached
- Template files: UNIPD examples downloaded locally