Vision Beyond the Screening Tests

Objectives of the Kansas Screening Program – So why should we talk about this…

A brief look at a three component model of vision – a complex system.

Optical
  Refractive error and eye health.
Visual efficiency
  Eye fixation, teaming, focusing and movements.
Visual information processing
  Visual memory, integration, perception and direction.

Discussion of screening tests – why do we do them?

What do we have to do?
  Acuity at distance – what exactly does this mean.
What are we doing now?
  Are we doing anything else? Why?
  The easy ones: Risk factors checklist, ABC’s of vision checklist, fixation
Why would we do any other tests?
  NPC, Depth, Tracking, Plus lens, Color vision
Let’s break some of these down and discuss their implications for vision
  What does it mean if a student fails one of these tests?
  What if they pass the tests?
Experience what it is like to fail some of these tests.
  Plus lens, depth, NPC
  Homework

Definitions of various vision problems – let’s make sure we are all on the same page.

Vision conditions outside the norm. It ain’t rare if it’s in your chair.
  We’ll work from common to uncommon.

Conjunctivitis – what exactly is “pink eye.”
  Bacterial, Viral, Allergic, Dry, Iritis
  Which of these affect students the most, how and why.
Strabismus – what is “lazy eye”
  Exotropia, esotropia, hypertropia
  The affect of strabismus – experience it, it is different for all.
Amblyopia – what is “lazy eye”
  Strabismic, anisometropic, ex-anopsia, disease.
  What’s the big deal?
Muscle and Nerve stuff.
  Watch how these eyes work.
  How can we help manage the school environment?
  Tracking problems – oculomotor dysfunction.
Duane’s Syndrome
Brown’s Syndrome
Sixth Nerve Palsy
Fourth Nerve Palsy
Bell’s Palsy
Ptosis – Droopy lid.
Cataracts – Blocking the view
  Congenital and traumatic also could be nutritional.
Glaucoma – Going blind without symptoms
  Congenital, acquired
Diabetes – small vessel disease
  Shift of refraction
  Retina problems
  This is a lot more than just eye
Head Trauma – we are finally paying attention
  Post concussion syndrome
  Visual effects of trauma, blunt force or infectious
  Orbital fracture – trapped muscle
  Cranial Nerve trauma
Nystagmus – Nothing is ever really clear
  How can you read with Nystagmus?
  What makes it better…
Retina and Macular diseases
  ROP: Retinopathy of prematurity
  Retinitis Pigmentosa
  Dystrophy: Cone/Rod dystrophy, Best’s disease,
  Juvenile macular degeneration, Stargardt’s disease (ABCR4 gene)
  Juvenile Retinoschisis (X-Linked)
Corneal and external disease
  Abrasions
  Nits
  Blepharitis
  Chalazion
  Hordeolum (stye)
  Pre-septal cellulitis
  Fuch’s Dystrophy
  Keratoconus
Retinoblastoma – it’s the worst
Visual Field deficits – how to name them
  When will they matter?
  How do we work around them?
Dyslexia – the “D” word
  More for the reading specialist and teachers
  They will probably ask you too.
Metabolic and genetic syndromes

Now for the fun part……
  Questions; Cases; How have handled these before and how did it work for you?
Objective of the Kansas Vision Screening Program:
Utilize uniform screening guidelines and referral criteria statewide
Collaborate on an interagency basis for intervention of identified problems.
Follow-up on all referrals where evaluation and/or treatment is recommended.
Maintain vision records on children and youth and document vision screening activities.