



Eskom Ekspo vir Jong Wetenskaplikes: Stellenboschstreekuitstalling en -kompetisie

26 & 27 Augustus / August 2010

Paul Roos Gimnasium / Paul Roos Gymnasium

Eskom Expo for Young Scientists: Regional exhibition and competition

'n Uitnodiging om deel te neem	An invitation to participate
<ul style="list-style-type: none"> • U skool word hartlik uitgenooi om praktiese, wetenskaplike navorsingsondersoeke vir die Stellenbosch-streekkompetisie van Eskom Ekspo vir Jong Wetenskaplikes in te skryf. • Projekte kan in 'n wye verskeidenheid <u>kategorieë</u> ingeskryf word. • Graad 7 tot 12 leerders is welkom om vir hierdie kompetisie in te skryf. • Ekspo het dit ten doel om wetenskaplikes te help ontwikkel wat 'n probleem/verskynsel/kwessie kan identifiseer, inligting kan insamel en dit kan analiseer, oplossings kan vind, en die bevindings effektief kan kommunikeer. • 'n Maksimum van 15 projekte (wat tydens assessering sowat 70% of meer by u skool behaal het) kan ingeskryf word. • Inskrywingsgeld sal R20 per leerder beloop. • Die finale sluitingsdatum vir inskrywings (saam met die geskrewe projekopsommings) is Vrydag 6 Augustus 2010. • Ons maak staat op u samewerking in hierdie verband! Laat of onvolledige inskrywings bemoeilik ons taak op meer as een manier! 	<ul style="list-style-type: none"> • <i>Your school is cordially invited to enter practical, scientific investigations for the Stellenbosch regional competition of Eskom Expo for Young Scientists.</i> • <i>There is a wide variety of <u>categories</u> in which projects may be entered.</i> • <i>Grades 7 to 12 learners are welcome to participate in this competition.</i> • <i>The aim of Expo is to help develop scientists that are able to identify a problem/phenomenon/issue, analyse information, find solutions, and communicate findings effectively.</i> • <i>A maximum of 15 projects (that obtained about 70% or more during assessment at your school) may be entered.</i> • <i>Entry fees will be R20 per learner.</i> • <i>The final closing date for entries (accompanied by written project summaries) is Friday 6 August 2010.</i> • <i>We are really counting on your cooperation in this regard! A late and/or incomplete entry really complicates our job in more than one way!</i>



Wat gebeur by die streekkompetisie?	What happens at the regional competition?
<ul style="list-style-type: none"> • 'n Maksimum van 15 praktiese navorsingsprojekte per skool word toegelaat en leerders stal hul projekte in bepaalde kategorie saam met deelnemers van verskillende skole uit. • 'n Maksimum van twee leerders word per projek toegelaat. Moedig leerders van meet af aan om nie meer as twee-twee saam te werk nie. • Elke projek word onafhanklik deur drie kundige persone <u>beoordeel</u> – gewoonlik 'n personeellid van die Universiteit, 'n onderwyser en 'n persoon uit die 	<ul style="list-style-type: none"> • <i>A maximum of 15 practical research projects per school are allowed and learners exhibit their projects together with participants from various other schools.</i> • <i>A maximum of two learners per project is allowed. Encourage learners from the start to work on their own or in pairs.</i> • <i>Each project is <u>judged</u> independently by three experts in the field. The judges are usually a University staff member, a teacher and someone</i>

<p>privaatsektor.</p> <ul style="list-style-type: none"> • Goud-, silwer- en bronsmedaljes word aan die beste projekte toegeken. • Spesiale kontantpryse word deur US-departemente en/of maatskappye aan die beste projekte in bepaalde studierigtings toegeken. • Deelnemers wat hierdie streek op nasionale vlak gaan verteenwoordig, word aangekondig. Daar word probeer om soveel moontlik skole en distrikte by hierdie groep in te sluit. • Alle deelnemers ontvang 'n sertifikaat van deelname om hulle aan Ekspo te herinner. 	<p><i>from the private sector.</i></p> <ul style="list-style-type: none"> • <i>The best projects are awarded gold, silver and bronze medals.</i> • <i>Departments of SU and/or companies present special cash prizes to the best projects in certain fields of study.</i> • <i>Participants to represent this region nationally are announced. We try to include as many schools and districts as possible in this group.</i> • <i>All participants receive a certificate of participation as a souvenir of their Expo experience.</i>
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<p>Wat 'n skool moet weet en doen om aan Ekspo deel te neem?</p>	<p>What should a school know and do to participate in Expo?</p>
<p>Indien dit nog nie gedoen is nie, kan 'n Ekspo-koördineerder by die skool aangewys word. Hierdie persoon se rol is om:</p> <ul style="list-style-type: none"> • 'n kontakpersoon en 'n skakel tussen u skool en die Ekspo-streekkantoor te wees; • belangrike inligting en vorms aan die hoof, betrokke onderwysers en leerders wat aan die streekkompetisie gaan deelneem, te besorg; • 'n mini-Ekspo by u skool te koördineer in samewerking met kollegas wat leerders ook praktiese navorsingsprojekte laat doen het, of om saam met buur- of klusterskole 'n gesamentlike Ekspo-geleentheid te reël; • saam met ander onderwysers en/of professionele persone in u omgewing as beoordelaar op te tree; • saam met kollegas op die 15 beste projekte in u skool te besluit; • die inskrywingsvorm voor of op Vrydag 6 Augustus 2010 te voltooi en aan ehoff@sun.ac.za te e-pos, ASOOK elke deelnemer se projekopsomming te e-pos of aan die streekkantoor deur te faks (021 808 3000). <p>Minstens twee onderwysers word benodig om as beoordelaars by die streekkompetisie op te tree. Begeleiding sal gegee word aan onderwysers wat nog nie Ekspo-ervare is nie.</p>	<p><i>If not done, an Expo coordinator can be appointed at the school. This person will be responsible to:</i></p> <ul style="list-style-type: none"> • <i>act as a link and contact person between your school and the Expo regional office;</i> • <i>forward important information and relevant forms to the principal and other teachers who have learners involved in the competition;</i> • <i>coordinate your school's mini Expo together with colleagues whose learners also did practical research projects, or to collaborate with neighbouring or cluster schools in offering a joint Expo event for learners;</i> • <i>with the help of fellow teachers and/or other professionals, act as judges;</i> • <i>with the help of colleagues decide on the 15 best projects in your school;</i> • <i>email the completed entry form to ehoff@sun.ac.za before or on Friday 6 August 2010, AS WELL AS fax or email the project summaries of the participants to the regional Expo office (021 808 3000).</i> <p><i>At least two teachers per school are required as judges at the regional competition in Stellenbosch. Expo-inexperienced teachers will receive the necessary guidance.</i></p>



Hoe bevorder ons 'n hoë standaard?	<i>How do we promote a high standard?</i>
<ul style="list-style-type: none"> • Skole word aangemoedig om soveel moontlik leerders by navorsingsondersoeke te betrek. Hoe meer leerders in 'n skool deelneem, hoe hoër is die standaard. • Die ideaal is om aan alle leerders die geleentheid en ondervinding te gee om hul werk uit te stal by 'n mini-Ekspo by die skool. • Skole word gevra om die navorsingsondersoek se opdrag so gou moontlik uit te gee en om oor 'n langer tyd aan leerders leiding te gee, sodat hulle die nodige kritiese denke en probleem-oplossingsvaardighede ten volle kan ontwikkel. Deur hierdie proses met spertye te bestuur, kan opvoeders terselfdertyd ook deeglike deurlopende assessering doen. • Leerders word gevra om 'n anti-plagiaatvorm te voltooi. Sodoende is daar 'n bewusmaking van hierdie belangrike aspek van navorsing. • Die ideaal is dat ingeskrewe projekte 70% by die skool/distrik-Ekspo moes behaal het om aan die streekkompetisie te kan deelneem. 	<ul style="list-style-type: none"> • <i>We encourage schools to involve as many learners as possible in doing research investigations. Standards are raised when more learners participate.</i> • <i>Ideally every learner should have the opportunity and experience to exhibit her/his work at a mini Expo at the school.</i> • <i>Schools are requested to hand out the research investigation assignment as soon as possible and to guide learners over a period of time so that they have full opportunity to develop critical thinking and problem solving skills. By managing this process with deadlines in mind, educators can at the same time do thorough continuous assessment.</i> • <i>Learners are requested to complete an anti-plagiarism form. By doing this they are sensitised to this important aspect of research.</i> • <i>Ideally projects submitted to the regional competition should have obtained 70% at the school/district Expo.</i>