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Towards a brighter future

Reija Helenius*

As I am writing this editorial, it is the most beautiful and lightest period of summer in Finland. The migratory birds have nested, waters are warm enough to swim in and the berries in the forest are beginning to ripen. The coronavirus seems to have also abated in our small country of 5,5 million people in northern Europe. A hope for normal life to return has begun to arise.

Corona has challenged and continues to challenge the ISLP community. The ISLP Open Meeting, which has become a tradition, cannot be organized in person during the World Statistics Congress 2021. The in-person conference cannot be organized either. We are meeting virtually, which challenges us to develop our activities so that belonging to the ISLP family would be even easier and more natural for everyone.

I have directed the International Statistical Literacy Project together with the ISLP Executive and the ISLP Advisory Board for over ten years. Our goal has been to get an official status and support to these activities. The efforts have reaped rewards, even if there is still work to do. From the year 2020 onwards, it has been possible to hire a part-time coordinator (p. 23) to support the ongoing functions of the project in a network of 150 voluntary country coordinators in 80 countries.

Without the voluntary work of the country coordinators, there would not be the ISLP project. Warm thanks to all of you. Together, we are more – the ISLP family. I would also like to thank all our sponsors (p. 35) and other supporters for their desire to promote statistical literacy as a key civic skill globally. In the spring, we produced a presentation video for the ISLP. Please share it with your own network. The more supporters we receive, the stronger we will be in the future and can make new activities possible.

Looking forward to upcoming encounters, both virtually and face-to-face.

With a bright and hopeful spirit, wishing you all well

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WSC SPECIAL!

The 63rd ISI World Statistics Congress, 11–16 July 2021

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NEWS FROM AROUND THE WORLD

POSTER COMPETITION

SAUDI ARABIA

Online Learning Transformative Impact During COVID-19: A Case of Saudi Arabia and Australia

Harman Preet Singh*

In today's knowledge-based economy, a country's growth and development are contingent on human capital investment. Thus, education, training, and skill development become critical components of a country's economic growth. Education, training, and skill development enable individuals, organizations, and nations to adapt quickly to labor market changes and to withstand intense global competition. Online learning is a new way of educating and preparing the workforce to develop their skills in today's knowledge-based economy. Online learning enables countries to rapidly improve the capabilities of their workers at a low cost. Additionally, online learning complements traditional education by allowing employees to learn at their speed, place, and time. Online learning is a powerful tool that countries worldwide are utilizing to improve their workforce's skills, particularly during the Coronavirus disease of 2019 (COVID-19).

The saving grace and silver lining during the current COVID-19 pandemic is online learning technology; it has served as an enabler and connector. COVID-19 has had a significant impact on the education sector globally, as is well known. The lockdown enforced in nearly all countries to ensure social distancing and the closure of face-to-face education institutions has left no other choice but to depend on online learning. To ensure that students worldwide do not fall behind in their studies, institutions have developed digital mediums for conducting classes and assessing students' results.

Online education has established itself as a powerful tool for educating and preparing the workforce in developing as well as developed countries over the last two decades. Online learning's transformative role has been observed in bridging the literacy and statistical gap between developing and developed countries. I will use Saudi Arabia and Australia as examples of developing and developed countries, respectively, to demonstrate the transformative impact of online learning.

Saudi Arabia's educational sector has seen significant change and growth over the last few years. Saudi Arabia intends to train 500,000 government employees via online learning as part of the Saudi Vision 2030 government program. The Saudi government assists job seekers in obtaining online certifications through the online learning program. One might argue that the country is making a concerted effort to transition to digital education. Saudi Universities have placed a high premium on online learning in this endeavor, especially during COVID-19. Since March 2020, universities have been transitioning to an online setting. The usage of learning management systems (LMS) such as blackboard, banner, and others has significantly increased in depth and breadth. Before COVID-19, the blackboard was mostly used to post instructional materials and announcements. However, during COVID-19, the use of blackboard includes conducting online classes, monitoring students' online participation, grading students' quizzes, tasks, midterm, final tests, presentations, and conducting seminars and official meetings.

Similarly, the usage of the banner platform has expanded. Before COVID-19, teachers mainly used the banner to track class schedules, teaching loads, and grade posting. During COVID-19, the new banner system

streamlined publishing and approving grades from the department head and dean. Grades are transmitted automatically to the student registration section following acceptance, and student records and transcripts are provided automatically. While the educational system was semi-automatic before COVID-19, i.e., a combination of manual and automatic processes, COVID-19 accelerated its transition to automatic. Saudi Universities can easily store and statistically mine the vast amount of student performance data generated online to prepare their online annual reports.

Additionally, Saudi Universities have made the annual assessment and contract renewal of faculty members an online operation. Employees may renew their Resident Permit (Iqama) online rather than visiting their Human Resource (HR) offices. Quality control reports such as course evaluations and program evaluations are produced, processed, and audited electronically. Additionally, Saudi universities are using their websites to inform students and the general public about COVID-19. Universities are critical in performing COVID-19 examinations, immunizing University employees at university-based vaccination centers, and relaying data to the Government. Such a large change in the educational sector in such a short period was unprecedented in Saudi Arabia before two years but is now commonly practiced during COVID-19.

In response to the emergence of COVID-19 as a pandemic, the Australian Government implemented national restrictions on foreign travel and social contact in public areas, workplaces, and educational institutions in Australia in mid-March 2020. Australian higher education providers accelerated their transition to online or remote learning and evaluation to maintain their students' engagement successfully. Due to the strict restrictions on social interactions, higher education providers were forced to adapt their teaching and learning styles and make a rapid transition from campus-based to online teaching and learning. The vast majority of higher education providers successfully implemented these changes to their teaching, learning, and evaluation practices, even though they had not previously participated in online or remote education, and students had to rapidly adjust to a significantly different educational experience that placed a much greater emphasis on online or remote learning.

In Australia, education providers have implemented mainly two broad categories of information technology resources to aid in student learning. The majority of institutions used their existing LMS for remote teaching to deliver material and assessments online, supplementing it with some interactive or meeting tools to facilitate tutorial-style discussion or presentation of practical tasks, depending on the discipline being taught. This was often accomplished using Zoom (or an equivalent) software to simulate face-to-face lecture delivery and facilitate online tutorials and discussion sessions. Students were more familiar with the LMS than with the collaborative tools that are typically used in technical or commercial settings. Second, the form of assessment and assessments needed to be altered in most cases, particularly if they were offered online, to retain the required linkages to learning outcomes. Numerous adjustments were made to assessment task timelines and, in some cases, grading systems.

The continuation of COVID-19 means that online learning regimes and transitions implemented in Saudi Arabia and Australia will need to continue for some time. The growth of online education demonstrates that it will continue to pave the way for closing the gulf between developing and developed countries in terms of statistical literacy. The learnings from Saudi Arabia and Australia indicate that some new opportunities to expand the use of online or blended learning have been found due to these transitional experiences related to COVID-19. Therefore, it is critical for the educational sector to assess the effectiveness of what has been accomplished and to recognize any potential changes to the new delivery modes.

About the Author

Harman Preet Singh is the recipient of the prestigious Fulbright Scholar-in-Residence, Erasmus Mundus Europe Asia, and UKIERI grants. In his illustrious career, he has served as a faculty/ research member at the University of Delhi, India; Fayetteville State University, U.S.A.; University of Warwick, UK; University of Warsaw, Poland; Debre Berhan University, Ethiopia, and the University of Ha'il, Saudi Arabia. He has authored two books, 34 research papers, 20 conference proceedings, nine edited book chapters, a case study, and presented 34 research papers in academic conferences worldwide along with a keynote address.

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FINLAND

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Corona pandemic accelerated communication at Statistics Finland

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The corona pandemic changed society and at the same time, the production of data. Up-to-date data were urgently needed on the effects of the coronavirus and its prevention. Statistics Finland responded to this challenge by speeding up the production of data and simultaneously, communication. We aim to safeguard our normal data production and at the same time develop new, faster and more innovatively produced statistics and information products.

Right from the onset of the corona pandemic we collected a corona website on our web pages where our customers can easily find all statistics related to the coronavirus. The corona website also contains an extensive selection of sources for data related to the coronavirus both nationally and internationally. The website also shows our statistical tweets related to the coronavirus on, for instance, changes in tourism, transport and the economy in the time of corona.

Experimental statistics on the impact of exceptional circumstances

Data during the pandemic period have also been produced regularly with experimental methods. Experimental statistics can be utilised to examine the impact of exceptional circumstances faster than normal statistics production. New kind of data and innovative calculation methods are used in the statistics.

An example of experimental statistics is the early estimate for the economy based on truck transport. The model was developed in collaboration between Statistics Finland and the Research Institute of the Finnish Economy (ETLA). The forecasts of economic cycles are based on the volumes of lorry traffic in Uusimaa at automatic traffic measurement points. Experimental statistics are published on our web pages and they are also reported on social media channels.

Weekly data on bankruptcies

The corona pandemic led to a partial stagnation of society, thereby increasing bankruptcies in many areas. Data on the number of bankruptcies were requested at a faster pace than before. Statistics Finland responded to this by publishing data at clearly more frequent intervals than before. For example, new instant preliminary data on the number of bankruptcies are currently published on the weekly level. The data are released on our web pages on Wednesday morning at 8 and are transmitted immediately to those interested in the topic also on our Twitter account.

Quarterly economic situation picture

In addition to renewals related to data production, we have invested in the accessibility of data. For example, the economic situation review examines the effects of the coronavirus from the perspectives of the national economy, enterprises, employment, consumers and public finances. The economic situation review is published on our website four times a year.

The pandemic situation has strengthened awareness of the importance of the situation picture of society. By improving the accessibility of data we aim to strengthen the use and effectiveness of statistical data in society. Especially economists and the media have been very interested in the overall picture given by the review.

Events turned into webinars

Statistics Finland usually organises several stakeholder events every year. In the meetings we network with various actors in society and establish new cooperation. This was also affected by the corona pandemic and physical events became webinars. Something good has

also come from this. A large number of our stakeholders from different parts of Finland, from outside the Helsinki metropolitan area, participate in the webinars. The coronavirus period has diversified the group of participants and facilitated the communication of information to stakeholders interested in regional data.

Innovation in data collections

The coronavirus period has required innovation for data collections as well. For example, it has not been possible to collect the price data needed in the calculation of the Consumer Price Index with customary sample-based methods. Due to coronavirus restrictions, face-to-face surveys made by statistical interviewers have been replaced by searching for prices on enterprises' web pages and transaction data from enterprises' data systems.

To make the data collection easier and reduce non-response, we implemented a video series on our social media channels at the early stage of the coronavirus period. In the series our employees explained why it is important to respond to a statistical inquiry if they get an invitation to one.

Citizens' Pulse measures Finns' feelings

On assignment of the Prime Minister's Office, we conduct the Citizens' Pulse inquiry, which provides information to support decision-making. The data on the Citizens' Pulse are obtained by adding additional questions concerning the coronavirus situation to Statistics Finland's data collections. The inquiry asks for people's opinions about the activity of authorities, respondents' state of mind, trust in the future, following the rules, helping others and how well they feel they have received information. The first online inquiry was conducted at the beginning of April 2020. The inquiry is repeated every three weeks and the results are published on the Government's website.

New experiments and data cooperation

In future, we will try to obtain more and more data materials generated in connection with the activity of enterprises. We have recently tested, for example, the use of bank payment card data and operator data for statistics compilation. These new materials would enable us to produce fast data to support economic statistics, for example. We tell about the experiments on our website and in webinars.

In exceptional situations, data production has been developed with several cooperative partners. We are involved, for example, in the situation room that focuses on analysing the economic situation set up by the economics research unit Helsinki GSE. Our role is to produce data for the researchers working in the situation room. Watch our video on cooperation on our YouTube channel: https://www.youtube.com/watch?v=dzY3Bd_eCl0

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PORTUGAL

COVID-19 and New data challenges for Statistics Portugal

José Pinto Martins*

In March 2020, Statistics Portugal (INE) started producing new statistics and new products for monitoring the social and economic impacts of the COVID-19 pandemic . INE Special COVID-19 – a dedicated area at www.ine.pt, which gathers all the information published by INE, as of March 13, in the context of the pandemic.

Synthesis INE @ COVID-19 Weekly report, which summarizes some of the most relevant statistical findings concerning the social and economic impact of the pandemic.

Dashboard COVID-19 | Context and Impact – Statistical indicators, updated daily, weekly and monthly, for a territorial reading of the demographic context and the socio-economic impact of the pandemic in Portugal. It is based on information from the Directorate-General for Health (DGS), the Institute of Employment and Professional Training (IEFP), the Interbank Service Society (SIBS), the Institute of Cinema and Audiovisual (ICA), and Statistic Portugal.

The impact of the pandemic in the Environment – within the scope of the publication of the Environment Statistics, Statistics Portugal published on December 21, 2020, a press release with contextual information on the impact of the pandemic on the environment, disclosing the latest data on the pressure put on the environment in 2020, due to the pandemic crisis.

National Accounts: Symmetric Input-Output Matrices – A specific press release, published on April 8, which presented the Symmetric Input-Output Matrices for the Portuguese economy, in relation to 2017. Based on this model, Statistics Portugal made a simulation of the impact on a country's GDP. The significant contraction in Tourism (as defined by the respective Satellite Account), a sector particularly affected by the COVID-19 pandemic.

Flash Estimate on Tourism Activity–Given the importance of this sector for the national economy, Statistics Portugal started to publish, as of March 27, a flash estimate on Tourism Activity in Portugal, anticipating regular disclosure by about three weeks.

Quick and Exceptional Business Survey. Joint project of the Statistics Portugal and Banco de Portugal (COVID-IREE), started on April 14, which aims to identify the effects of the pandemic on business activity.

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Special Highlight Statistics Portugal COVID-19

BRAZIL


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Statistics in the midst of the COVID-19 pandemic: reflections and approximations

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The COVID-19 Pandemic, although challenging, did not constitute an obstacle for our collaborative work. The Collaborative Group for Teacher Training in Statistical Education- MoSaiCo Edu- has been running since 2018, with participating teachers from a variety of different professional backgrounds and experiences. Through biweekly meetings, the Group promotes, among other topics, dialogue and reflection on texts, which deal with Statistical Education, the official documents *Base Nacional Comum Curricular*- BNCC (BRASIL, 2018) and *Documento Orientador Curricular do Território Rio-grandino* – DOCTRG (SANTOS, 2019), which guide pedagogy in Basic Education. It was during these theoretical and practical reflections, the decision was taken to develop the statistical education through Statistical Learning Projects – SLP, an interdisciplinary approach, in two Brazilian elementary schools, in Rio Grande city, Rio Grande do Sul state. The SLPs are based on investigative processes, where statistical knowledge is integrated into a broader process of investigation. In this proposal, students develop a research question based on their interests and concerns, a strategy that also involves the construction of a data collection instrument, production, analysis, and presentation of the results, by means of graphs, tables and descriptive measures.

Public Elementary Schools *Pedro Carlos Peixoto Primo* and *Manoel Martins Mano*, through the SLP, pioneered practices and developed the first pedagogical experiences. For this reason, they are the focus of research and discussion in the MoSaiCo Edu Group that aims not only to promote a space for teacher training and learning, but above all, to improve statistical education as part of daily pedagogical practices in school activities.

At *EMEF Pedro Carlos Peixoto Primo*[1] , the interdisciplinary work in the Elementary School classes (which refers to the 6th to 9th grades of Elementary School) started in Portuguese Language subject.

1 Public school at Querência neighborhood, in Rio Grande city – RS/Brazil.

Figure 1: Peixoto Primo Elementary School
Source: Teacher's collection (2021)

The project, whose purpose was to profile the student's group, started with a provocation, that is, a conversation between the students and the teacher. The first step of the project was to collect, from the students, the questions they were most interested in researching. Some variables[2] were then selected: number of boys and girls in the class, age group, place of birth, neighborhood, family configuration, number of brothers, family religion, year they started school, favorite subject, leisure preferences, favourite soccer team, musical preferences, high schools they intended to attend, and professional aspirations. From there, students created a questionnaire, which was given to ninth grade students to complete, making it possible to create graphs with the data obtained from the answers[3]. Fig 2 is an example of one of the charts:

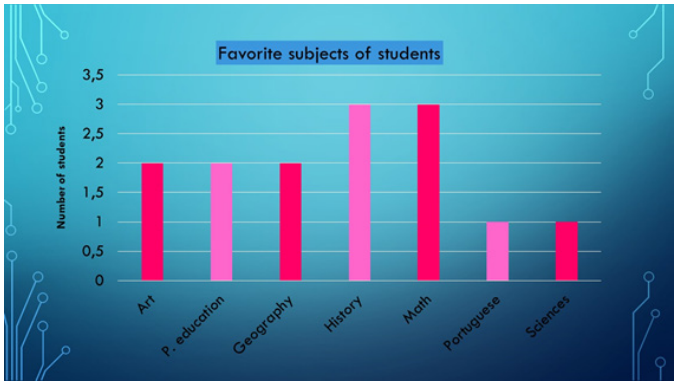

Figure 2: About the favorite subject of the students at Pedro Carlos Peixoto Primo school
Source: Teacher's collection (2020)

From a pedagogical perspective, statistical knowledge enables teachers to work with different themes in the classroom, using an interdisciplinary approach. Moreover, by working with themes that are of interest to students, it improves the interaction between teacher and students, as well as between the students themselves, who start to discuss in class subjects that are part of their daily lives, such as their favorite food, their soccer team, their taste in music, etc.

At *EMEF Manoel Martins Mano*, statistical learning emerged from objectives described in the DOCTRG (SANTOS, 2019), which aim to develop argumentative skills from reading, interpretation, and text production- work carried out through an interdisciplinary project.

Figure 3: Manoel Martins Mano Elementary School
Souce: Teacher's collection (2021)

The project promoted reading of different genres, required the reading of statistical data, development of a research question, and writing practices based on data. The proposal culminated with the individual organization of Digital Journals publicized by social networks, breaking down the barrier that students produce knowledge only to be read/evaluated by the teacher.

According to Fuza et al (2011, p. 490) *"a linguagem não só para expressar o pensamento ou para transmitir conhecimentos, mas também para agir, atuar sobre o outro e sobre o mundo"*[4]. The journals were disseminated by the social networks of the school in the form of an online journal stand. Figure 4 presents an image of the padlet platform illustrating the 9th grade students' journals.

2 It is important point out that the ninth grade class suggested these research questions. The other groups had different research questions.

3 As mentioned before, one of the interests of the group (9th grade) was to know how many people like each subject at school. The students could only choose one subject.

4 "...the language not only to express the thought or to transmit knowledge, but also to act, to act on the other and on the world" Fuza et al (2011, p. 490) (Our translation).

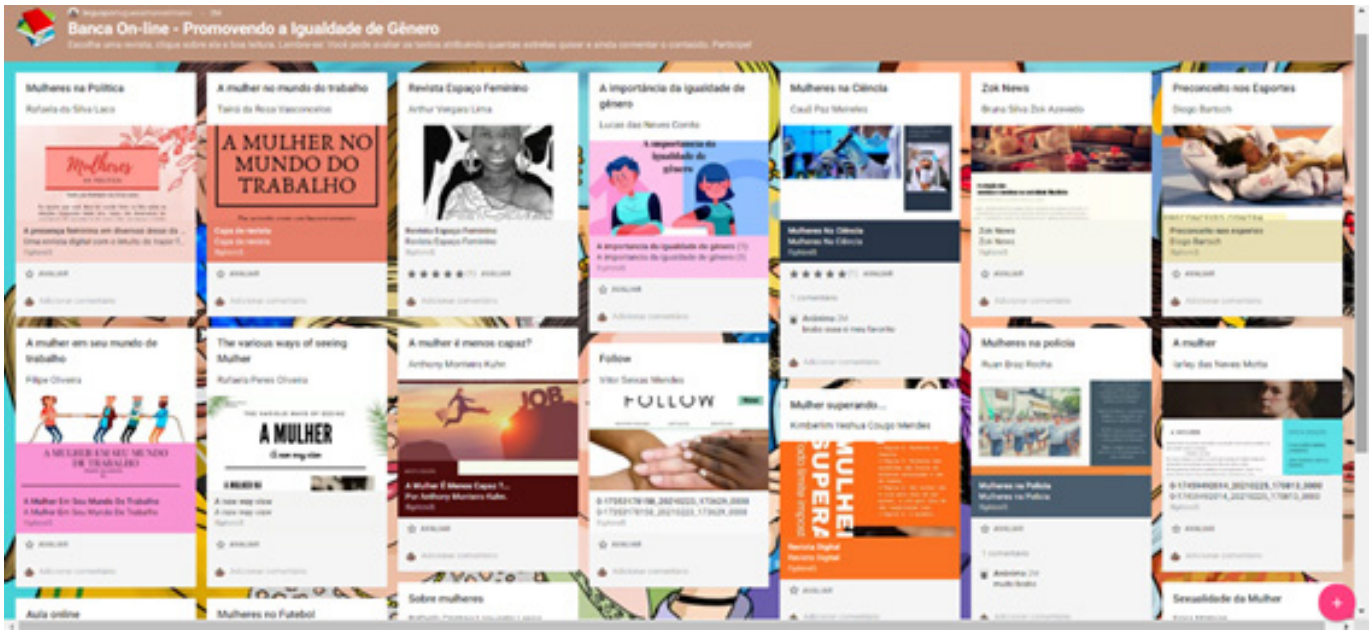

Figure 4: image of the padlet platform with the 9th grade students' journals.
Source: Collection of the teacher (2020).

The interdisciplinary projects developed in two elementary schools and encouraged by the discussions and learning shared in the Collaborative Group worked as indispensable tools in promoting Statistical Literacy (GAL, 2002), both for students and teachers. It is important to point out that through the work done by the MoSaiCo Edu Group, Statistics has been gaining space in classrooms but also in the online modality, overcoming the challenges imposed by the pandemic, in favor of the development of statistical competencies, given the training of teachers through a context of collaborative work.

For more information, see the website:
https://mosaico.furg.br/

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A estatística em meio à pandemia do COVID-19: reflexões e aproximações

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O contexto da Pandemia do COVID-19, embora desafiador não se constituiu como um obstáculo para o trabalho que, desde 2018, o Grupo Colaborativo de Formação de Professores em Educação Estatística – MoSaiCo Edu vem realizando, com a participação de professores com diferentes experiências e formações profissionais. Por meio de encontros quinzenais, o Grupo promoveu, dentre outras temáticas, o diálogo e reflexão acerca de textos que tratam sobre a Educação Estatística e os documentos oficiais *Base Nacional Comum Curricular* – BNCC (BRASIL, 2018) e *Documento Orientador Curricular do Território Rio-grandino* – DOCTRG (SANTOS, 2019), os quais orientam as ações pedagógicas na Educação Básica. E foram esses momentos de reflexão teórico-práticos que estimularam propostas de trabalho com a Educação Estatística por meio de Projetos de Aprendizagem Estatísticos – PAE, sob o viés interdisciplinar, em duas escolas de Educação Básica municipais brasileiras, da cidade de Rio Grande, no Rio Grande do Sul, participantes do projeto. Os PAE são baseados em processos investigativos, onde os conhecimentos estatísticos são integrados a um processo de investigação mais amplo. Nesta proposta, os estudantes desenvolvem uma pesquisa a partir de seus interesses e inquietações, estratégia que também envolve a construção do instrumento de coleta de dados, produção, análise e apresentação dos resultados, por meio de gráficos, tabelas e medidas descritivas.

As experiências pedagógicas desenvolvidas nas escolas municipais de Ensino Fundamental Pedro Carlos Peixoto Primo e Manoel Martins Mano por meio de PAE foram desenvolvidas através de práticas pioneiras, na modalidade não presencial, e por essa razão se tornou objeto de pesquisa e discussão no Grupo MoSaiCo Edu, que tem como objetivo não só promover um espaço de formação e aprendizagem docente, mas sobretudo, aprimorar o trabalho desenvolvido com a Educação Estatística como fazer pedagógico diário das atividades escolares.

Na EMEF Pedro Carlos Peixoto Primo[1] o trabalho interdisciplinar com as turmas do Ensino Fundamental II (que se refere ao 6º ao 9º ano do Ensino Fundamental) teve início na disciplina de Língua Portuguesa.

1 Escola municipal situada no bairro Querência, na cidade de Rio Grande – RS.

Figura 1: Escola Municipal de Ensino Fundamental Peixoto Primo. Fonte: Acervo das autoras (2021)

O projeto cuja finalidade era traçar o perfil das turmas, começou com uma provocação, ou seja, uma conversa entre estudantes e o professor. O primeiro passo do projeto foi coletar, junto aos discentes, quais eram as questões que eles tinham maior interesse em pesquisar. Foram, então, selecionadas algumas variáveis[2] : número de meninos e meninas da turma, faixa etária, naturalidade, bairro em que residem, configuração familiar, número de irmãos, religião familiar, ano de ingresso na escola, matéria preferida, preferências de lazer, time de futebol, gosto musical, escolas que pretendiam fazer o ensino médio e aspiração profissional. A partir daí foi criado um questionário que, uma vez aplicado para os estudantes do nono ano, possibilitou a criação de gráficos com os dados obtidos nas respostas. Abaixo, um exemplo de uma das questões[3] sugeridas:

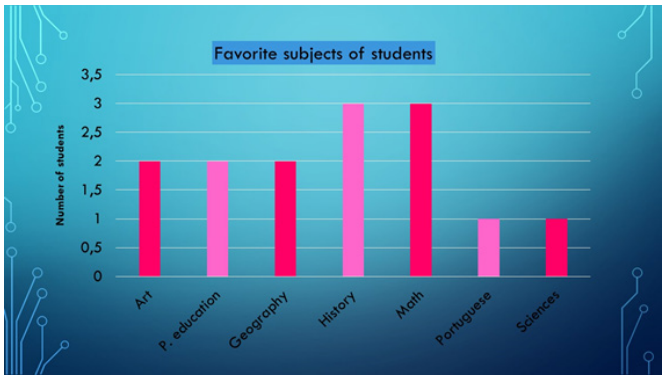

Figura 2: Gráfico sobre a matéria preferida dos alunos na escola Peixoto Primo. Fonte: Acervo da professora (2020)

2 Vale destacar que estas questões de pesquisa foram sugeridas pela turma do nono ano. As demais turmas tiveram questões diferenciadas para a pesquisa.

3 Conforme já mencionado, um dos interesses da turma era conhecer a quantidade de pessoas que gostavam de cada matéria da escola. Os alunos só podiam optar por uma disciplina.

No contexto desta proposta pedagógica, os conhecimentos estatísticos possibilitaram que o professor trabalhasse diferentes temáticas em sala de aula, também sob um viés interdisciplinar. Além disso, por trabalhar com temáticas do interesse dos discentes, possibilitou uma aproximação entre o professor e os alunos, assim como entre os próprios educandos, que passaram a discutir em sala de aula, assuntos que faziam parte do seu dia a dia, como por exemplo, a matéria preferida, o time de futebol, o gosto musical etc.

Na EMEF Manoel Martins Mano, o aprender estatístico surgiu a partir de objetivos descritos no DOCTRG (SANTOS, 2019), que visam o desenvolvimento da habilidade argumentativa nos processos de leitura, interpretação e produção de textos – trabalho realizado por meio de um projeto interdisciplinar das disciplinas que compõem a área das linguagens (Língua Portuguesa e Língua Inglesa).

Figura 3: Escola Municipal de Ensino Fundamental Manoel Martins Mano. Fonte: Arquivo das autoras (2021)

O projeto promoveu a leitura de diferentes gêneros textuais, os quais exigiam a leitura de dados estatísticos, o desenvolvimento de uma pesquisa e a produção de novos textos com base em dados. A proposta culminou com a organização individual de *Revistas Digitais* que foram divulgadas nas redes sociais rompendo a barreira de que o aluno produz conhecimento apenas para ser lido/avaliado pelo professor.

É por acreditar que a prática da produção/divulgação de textos objeto de pesquisa estatística considera "a linguagem não só para expressar o pensamento ou para transmitir conhecimentos, mas também para agir, atuar sobre o outro e sobre o mundo", conforme apontam Fuza et al (2011, p. 490), ao retomar Geraldi (1984), que as revistas produzidas ganharam espaço nas redes sociais da escola em forma de uma banca de revistas *on-line*. Na sequência, apresenta-se a Figura 4,

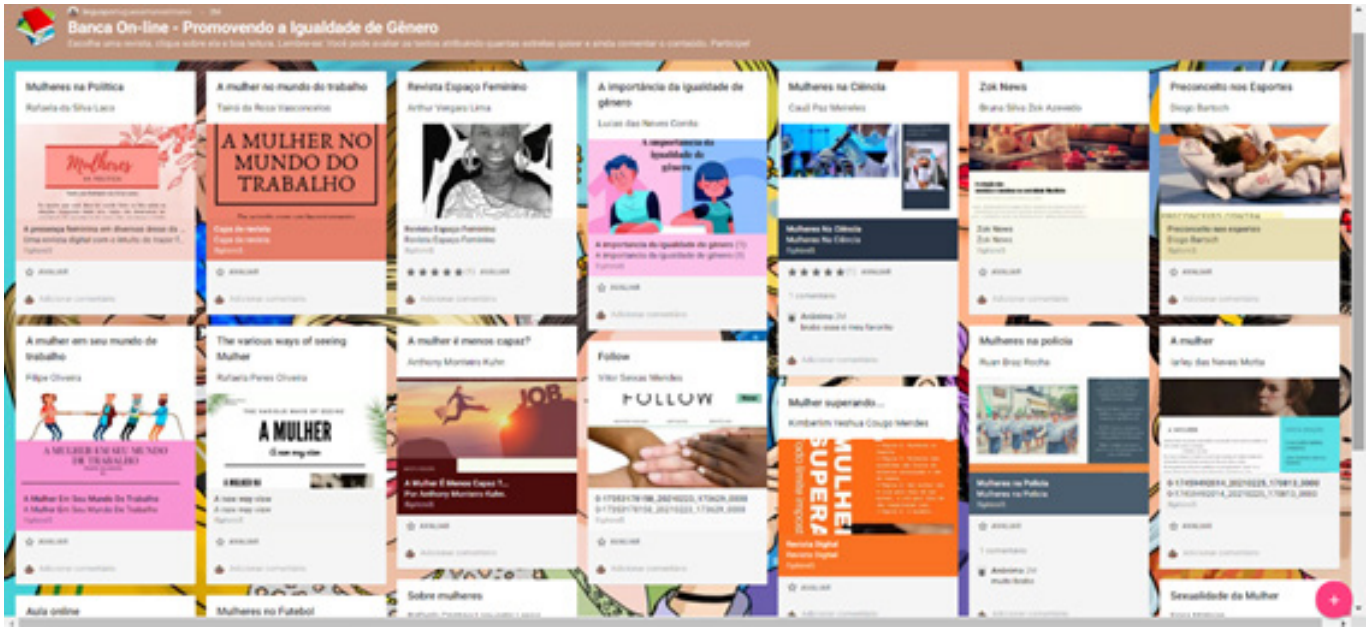

Figura 4: imagem da plataforma padlet com as revistas dos estudantes do 9º ano. Fonte: Acervo da professora (2020).

que contém uma imagem da plataforma padlet com as revistas dos estudantes do 9º ano.

Os projetos interdisciplinares desenvolvidos nas duas escolas de Educação Básica, incentivados pelas discussões e aprendizagens compartilhadas no Grupo Colaborativo, funcionaram como instrumentos indispensáveis à promoção do Letramento Estatístico (GAL, 2002), tanto de estudantes quanto dos próprios professores. É importante destacar que, através do trabalho realizado pelo Grupo MoSaiCo Edu, a Estatística vem ganhando espaço nas salas de aula, também na modalidade on-line, superando os desafios impostos pela Pandemia, em prol do desenvolvimento de competências estatísticas, haja vista a formação dos professores por meio de um contexto de trabalho colaborativo.

Para maiores informações, consulte o site: https://mosaico.furg.br/

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IRELAND

Response to the Covid-19 pandemic – Ensuring citizens had easy access to trustworthy informationAeidín Sheppard*

Aeidín Sheppard*

Introduction

The Covid-19 pandemic has had a global impact and its effect has been experienced across both the economy and society of the countries affected. When CSO Ireland began working remotely back in March 2020, the initial focus was to ensure that the regular outputs continued to be published, and to explain any delays or changes to the data in an effective and transparent manner. It was a huge learning experience for the organisation, as we moved from a situation where a small group of people occasionally worked remotely, to the whole organisation working full-time from home in the space of a week!

Meeting demands for Information

Once we had all adjusted to the new normal in terms of our working conditions, it quickly became apparent that the CSO would have to respond to new data requirements as Government, Business and the wider Society, began to try and understand what was happening. Some of the key areas where people wanted reliable information quickly, included the number of Covid-19 cases and deaths, the impact of lockdown measures on the Labour Market and the impact of lockdown on people's health and wellbeing.

- The Monthly unemployment and Live Register releases were updated to measure and explain the impact of Government supports on the Labour Market. https://www.cso.ie/en/releasesandpublications/er/mue/monthlyunemploymentapril2021/
- The Covid-19 Deaths and Cases release was created to provide analysis of the impact of the pandemic across regions, age cohorts etc. https://www.cso.ie/en/releasesandpublications/ep/p-covid19/covid-19informationhub/health/covid-19deathsandcasesstatistics/

- The Social Impact of Covid-19 surveys were quickly put in the field, with a short turnaround time to publication to assess the impact the pandemic was having on the well-being and attitudes in our society. https://www.cso.ie/en/releasesandpublications/ep/p-covid19/covid-19informationhub/socialandwellbeing/socialimpactofcovid-19surveyfebruary

Transparency and Clarity

As we worked to get information to our users as quickly as possible, it was important to ensure that they understood the methodology we were using and the impact the pandemic was having on our data. For example, we needed to explain how Pandemic Unemployment Payment was being treated in the context of the ILO internationally agreed standard measure of unemployment, and the impact of low response rates on the quality of the data we were able to publish in relation to the effects of the pandemic. Each Covid-19 related release was accompanied by a press release or information note, which explained how the data was compiled and highlighted any issues there may have been with collection or analysis. This ensured that users understood the context and limitations of these new and adjusted publications.

Covid-19 Information Hub

As we began to produce all these new products and began to understand how deeply the pandemic was impacting on our society, we realised that it was important that people could view this impact in a cohesive manner. The Covid-19 information hub was designed as a space where citizens could access all the Covid-19 related data in one place, as well as getting snapshots and user-friendly visualisations of the huge amount of data that is available. https://www.cso.ie/en/releasesandpublications/ep/p-covid19/covid-19informationhub/. We issued a press release announcing the hub, promoted it across all out social media channels, and created a link to the hub from our homepage. We are proud to say that the hub has received high levels of traffic and CSO Covid-19 related statistics have been regularly used by media and commentators throughout the pandemic.

Beyond Covid-19

The effects of Covid-19 are unfortunately still being felt in our society and CSO will continue to measure this impact and publish its analysis. However, there is now cause for optimism that at some point we will be able to return to a version of pre-pandemic life. Some things have emerged in the last 12-18 months however, we would like to hold on to. We have learned that we have the capacity to act quickly and innovatively in a crisis and develop new and flexible outputs to meet the needs of our users and citizens. CSO is currently embarking on an exciting new project called Pulse Surveys, which is designed to capture people's views and attitudes to topics at a point in time. This is a departure from our more traditional sample-based surveys, and is building on the learning and success of the Social Impact surveys we introduced during the pandemic. We hope to provide an update on this project in a future newsletter. In the meantime, we at CSO Ireland would like to wish all our friends and colleagues in the ISLP community well and hope for brighter times ahead for us all.

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GERMANY

Statistics in My Life How to become a statistician?

Walter J. Radermacher*

My first contacts with statistics were on the side of the respondents. My parents had a medium-sized trading business and were therefore regularly burdened with statistical questionnaires. As a student of economics, I was given the task of answering these questions. This gave me a critical view of the relationship between theory and practice, between aspiration and reality. During my studies, I discovered that I was interested in the quantitative side, which I had plenty of opportunities to do at the Institute for Operations Research and Mathematics after graduation. During this time, I also noticed that I enjoyed teaching and that I received positive feedback from the students. Nevertheless, theory and teaching alone were not enough of a perspective for me. I was looking for a broader mix of theory and practice, closer to real issues and decisions, concrete application of what I had learned. As a child of my time, my interest was less in applications at the corporate, insurance or banking level. Rather, I was interested in the social, political and economic issues and conflicts of the society of the time and how their solution could succeed by means of statistical information. For me, it was very fortunate that the Federal Statistical Office in Germany hired many young employees in the second half of the 1970s to make use of the then still new possibilities of data processing for the modernisation of statistics. So it happened that I found myself as a junior statistician in this institution, tasked with organising and conducting a national census of trading companies, hotels and restaurants. Thus, I was back in the area I knew from home, only now on the opposite side of the survey.

Zen or the art of statistical maintenance[1]

In my first episode as a statistician, I had the opportunity to become familiar with the practice of large-scale surveys, whether as census or sample survey. This was not even about the really difficult questions, because the survey programme, the budget and most other important parameters were already fixed. Nevertheless, I learned what it means to survey several millions of companies, which organisational, logistical and technical tasks have to be solved so that the quality of the results is right in the end. The essential lesson from this was that statistics are produced, that they are products like many others, and that comparable principles for good management and quality therefore also apply in their production.

With this experience in the bag, I took on a new task in the Office's experimental laboratory in the mid-1980s, namely exploring the possibilities of aerial photographs, satellite images and maps for statistics, especially land use. Today, no one would deny that the use of geocoded data has great potential for statistics. Back then it was different, still close to utopia, mainly because of the still insufficient information technology possibilities but also because the community of statisticians is conservative. As an anecdote, I remember being asked after a presentation how much data storage we needed for the digitisation of aerial images we were planning for the whole of Germany, for which I specified 12GB. The questioner then pointed to a birch tree outside the building to make it clear to me that I would need data storage up to this tree, meaning it was impossible.

By the beginning of the 1990s, the discussion on GDP and the measurement of welfare had gained momentum. The President of the NSI was invited to appear before the Economic Committee of the German Parliament and questioned on his perspectives. The main issue was the inclusion of environmental aspects and of (unpaid) household labour in the macroeconomic accounting framework. At the end of the hearing, he promised that both aspects would be included in the national accounts within two years. The next day, the headline of a daily newspaper read that the president of the NSI had announced a feminist Eco-Social Product. And I was tasked with making this dream a reality. There was no lack of budget, nor of political will, as one can

1 A tribute to R.M.Pirsig's famous book https://en.wikipedia.org/wiki/Zen_and_the_Art_of_Motorcycle_Maintenance

imagine. The problem was rather to design a methodological concept that corresponded to scientific demands and ideas on the one hand, but on the other hand was also empirically realisable with good quality. And here I once again encountered the familiar gap between theory and practice. Economists in the appointed scientific advisory board approached the matter with ideas that had perhaps been tested in small research experiments, but which were not transferable to the scale of macroeconomics, certainly not with the quality standards required of official statistics. Above all, it was difficult, indeed almost impossible, to gain an understanding of the fact that a monetary valuation through the simulation of entire non-existent markets (e.g. for ecosystem services or degradation of environment) cannot be a matter for official statistics, because it contains too many judgements and normative settings.

Environment Economic Accounting, like other new fields of work, is very much characterised by international cooperation. In official statistics, there are so-called City Groups for this purpose, in the case of environmental economic accounting the 'London Group', which has been working together on standardised methods for 25 years. Like the System of National Accounts (NSA), the System for Environmental Economic Accounting (SEEA) has meanwhile been adopted as a statistical standard by the UN Statistical Commission. This standardisation process was prepared by a UN Committee, of which I was the first Chair from 2005 to 2008.

Through this work on methods and new procedures of quantification and accounting, I have learned how much the cultural identities and codes vary in different communities of official statistics, which has a significant impact on the understanding of what quality means in accounting versus what quality means in survey statistics.

A second lesson was that statistics is driven by three forces, societal demand, scientific concepts and statistical methods, and data: 'science, statistics & society'[2] .

A third lesson after about three decades of engagement in this field is that progress is (at least partly) cyclical.

2 See my book Official Statistics 4.0 https://www.springer.com/gp/book/9783030314910

Management of quality – Quality of management

At the end of the 1990s, I changed to the management of the office, initially responsible for organisation, controlling and quality management. In the course of the following years, my area of responsibility grew until I was finally appointed President of the Federal Statistical Office in 2006.

During this period, the focus was very much on improving the efficiency of statistical production through the use of Total Quality Management and following the principles of New Public Management. Here, too, cooperation and an exchange of information and experience at the international level was important to me. For example, I worked in a group with other European statisticians on a report for common guidelines and quality standards for the European statistical system. This in turn broadened my horizons enormously, not least in that I had the privilege of meeting two experienced statisticians with very different profiles, both of whom have unfortunately passed away, Alain Desrosières and Lars Lyberg. In this group, I learned that there is a theory and scientific direction that deals with the conventions of quantification, and that the quality and trustworthiness of statistical information is very much influenced by this topic.

In 2008, I followed the call to Europe and became Director General of Eurostat, the statistical office of the European Union, and Chief Statistician of the EU. When I started, my plan was to drive the modernisation of statistics and to integrate the spaghetti bowls of individual and parallel statistical processes into a comprehensive business architecture. Very quickly, however, my plans were dominated by the fact that we had a problem with the reports on financial statistics from Greece. What happened next is well known: A crisis of public debt and the Euro was triggered. Lessons were learned for statistics from the crisis mode of the following years, namely in the form of a strengthening of governance and above all through the European Statistics Code of Practice[3] . It is more than regrettable that our colleague Andreas Georgiou, who during this period modernised Greek statistics and made them compatible with predefined international standards, has to face unfounded accusations in the Greek courts, and still does so today[4] .

During my time in Eurostat, I took up and advanced a project that had already been started when I worked in Germany. With the aim of improving education for the next generation, the European Master for Official Statistics EMOS[5] was established. In close cooperation with European universities, the profile of this new training course was designed and participants were selected by tender. More than 20 universities are now participating in this programme.

From the Factory to the Library

After my retirement at the end of 2016, I was active at the Sapienza University, first as a doctoral student and, since my PhD, as a visiting researcher. In addition, since 2017 I have been the president of an umbrella association of national statistical societies with the abbreviated name FENStatS [6]. Actually, throughout my professional life as a statistician, I have always kept close contact with the academic side, be it in research or in teaching. Since 1997, I have attended all ISI conferences (with a few exceptions). I have been working on the scientific side for a few years now, but I am still very interested in the practical world. Especially now, in times of the pandemic, the best possible statistics are needed; but especially now, the weaknesses of statistical systems become apparent when flexibility and innovation are required[7] . It is also becoming abundantly clear how important statistical literacy is, across the breadth of the population. With a group in FENStatS and in cooperation with ISLP, I am particularly committed to improving education at the moment[8].

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3 https://ec.europa.eu/eurostat/documents/4031688/9394019/KS-02-18-142-DE-N.pdf/27ca19ca-e349-45f8-bbd4-4d78a33601ae?t=1542709797000

4 https://www.amstat.org/asa/News/Greek-Statistician-Found-Liable-for-Slander-Continues-to-Face-Persecution.aspx

5 https://ec.europa.eu/eurostat/cros/content/emos_en

6 https://fenstats.eu/

7 https://medium.com/data-policy/how-statistics-can-help-going-beyond-covid-19-22bb2ce92440

8 See https://medium.com/data-policy/official-statistics-language-for-public-discourse-part-1-294d31e56b6e and https://medium.com/data-policy/official-statistics-language-for-public-discourse-part-2-b9e912621523

ZIMBABWE

New Country Coordinator for Zimbabwe

Sean Sithole*

Sean Sithole is Zimbabwe's country coordinator for the International Statistical Literacy Project (ISLP), as well as a member of the Young African Statisticians (YAS) where he is part of the Executive Committee and Coordinator for programme Advocacy. Sean is a Doctoral (PhD) candidate in Development Studies at the Institute for Social Development, University of the Western Cape.

He has work experience from projects which were centred on statistics or quantitative methods, mandated by the United Nations Economic Commission for Africa (UNECA), Statistics South Africa (Stats SA), United Nations Population Fund (UNFPA), Scalabrini Institute for Human Mobility in Africa (SIHMA) and the University of the Western Cape (UWC).

Advocacy and promotion of statistics

Sean is driven by the 4th industrial revolution, digital transformation and technological advancement in the 21st century. He believes that statistics are a fundamental part of technology for development. Central to this is his desire to promote and advocate for statistical literacy by:

- working with governments, public and private organisations in promoting, advertising and supporting statistical literacy.
- promotion and advancement of learning programmes that use quantitative methods like Statistics, Population Studies, Demography, Development Studies, Economics, and Geography, including other disciplines that help to address the United Nations Sustainable Development Goals (SDGs).
- contribute through workshops and training programmes that empower participants to use statistical/ quantitative approaches and methodologies (including the use of Excel and other advanced programmes like STATA and SPSS) and explain why scientific/evidence-based research is important.
- use social media platforms to share information on statistical literacy and quantitative research.
- promote the use and utilization of technological devices and applications for quantitative research and data for development.
- advocacy for conference/events attendance, participation and publication of quantitative research

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RWANDA

New Country Coordinator for Rwanda

Jean Bosco Mugiraneza*

Eng. Jean Bosco Mugiraneza is the Technical Advisor on Energy in the Ministry of Infrastructure of the Republic of Rwanda and serves as the National Liaison Officer (NLO) for International Atomic Energy Agency (IAEA) matters in Rwanda. He also serves as the President at the Board of Directors of SINELAC. Prior to joining the Ministry of Infrastructure, Jean Bosco worked as the CEO of Rwanda Energy Group (REG). He is a member of the International Association of Engineers (IAENG), member of International Statistical Engineering Association (ISEA), Fellow of the Institution of Engineers Rwanda (FIER) and Member of Research Coordination Committee. Because of his long list of achievements, Jean Bosco was the recipient of the Africa CEO of the Year Award 2016 by African Leadership Magazine. He holds a Master of Engineering degree from the City College of the City University of New York in USA.

In the last 20 year the Government of Rwanda has invested a lot in computer literacy. Today, he can see how computers are contributing to the social economic development of the country by transforming lives of people. Similarly he believes that statistics has a lot to contribute to the national economy. The vision 2050 and the national strategic transformation are targeting to elevate Rwanda among upper middle income countries. It's obvious that statistics will play a key role in that journey. A modern society relies on statistics!

He is convinced that statistics is key for sustainable development since it's a useful tool for planning, monitoring and decision making. In this era of technology statistical data can be regarded as an asset for a company/country. The most important thing is how to use that asset. Facts and figures based on statistical are helpful in health care, nutrition, education, elections and so on. In developing countries sometimes keeping statistical data is still a challenge. Another element that needs particular interest related statistical thing and the interpretation of statistical data.

He have published the work "On the Statistical Analysis of the Dynamics of Rational Function Having Poles" in the Journal of Emerging Trends in Computing and Information Sciences (CIS), Vol. 3 No.2, pp:155-172 February 2012, and "Quantum Wavelet Transforms Generated by the Product of the Sine Polynomial and the Gaussian Envelope on the Tetrahedral Graph" in International Journal of Image, Graphics and Signal Processing (IJIGSP), Vol.10, No.7, pp. 11-24, 2018.doi: 10.5815/ijigsp.2018.07.02, as well as the co-author of the book "Principles of Engineering Analysis" published by Narosa Publishing House, February 25, 2012, ISBN: 9788184871456 in India & Alpha Science Int'l Limited, March 2012, ISBN: 9781842657010 in UK.

He have recently joined the International Statistical Engineering Association (ISEA). This emerging area has potential applications in Big Data Problems. As an Electrical Engineer and the former CEO of the power utility he believes that Statistical Engineering will play a tremendous role in smart grid particularly in handling data in Phasor Measurement Units (PMUs).

Finally, it's his pleasure to join the ISLP community.

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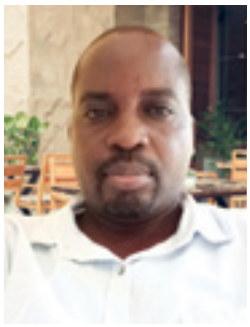
GUINEA



New Country Coordinator for Guinea

David Senzanje*

My name is DAVID SENZANJE and I teach Advanced Placement Calculus AB and Statistics courses to 10th – 12th-grade students at the American International School of Conakry in Guinea.

I believe that statistical understanding and analytical skills are not only a fundamental part of the academic part of academic excellence, but also the building blocks of critical thinking in high school and beyond. I constantly explore various opportunities to broaden my students' experience while learning Statistics. I desire to see my students appreciate the beauty and power of Statistics and its application in the real world.

In addition to teaching Advanced Placement Math and Statistics curriculum for the school, I am also a qualified advanced level Physics teacher. I have been teaching Math and Physics for the past 16 years. Countries I have worked as a teacher include Zimbabwe, Swaziland, South Africa, Haiti, Togo, and Guinea.

Apart from my full job as a teacher, I am also a part-time International Baccalaureate (IB) Assistant Math Examiner.

I hold a BSc Ed in Mathematics and Physics from the University of Zimbabwe and a BSc (Honors) in Environmental Monitoring and Modelling from the University of South Africa. Currently, I am studying M. Ed. in Instructional Technology at the University of Zambia.

I look forward to working with ISLP to promote Statistical Literacy to my students and other learners in Guinea as a whole.

Thank you!

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USA

Statistical literacy: A new mission for data producers

Milo Schield*

"Statistical literacy: A new mission for data producers" has been cited 37 times as of year-end 2020, according to Google Scholar. This paper presents examples of misleading tables from official statistics and the results of an international survey of statistical agency personnel. Statistical agencies are encouraged to expand their mission: "to generate accurate and timely data that is comprehensible by and useful to decision makers." This paper was authored by Milo Schield, a US Representative of the ISLP, an elected member of the ISI and a Fellow of the ASA. Copy at www.statlit.org/pdf/2011SchieldSJIAOS.pdf

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NEW ZEALAND

New resources on the ISLP website

John Harraway*

A new video with two components was added as the 21st video on the resources section of the ISLP last week. The videos aim to encourage learning in statistics and are linked to the website of the Department of Mathematics and Statistics at the University of Otago. They have generated between 100,000 and 300,000 independent hits across 40 countries.

The new video outlines the accurate and non-invasive diagnosis of prostate, bowel, and cervical cancers in dogs. The first component outlines the statistical concepts of sensitivity, specificity, false negatives, and false positives in simple terms. The second describes the use of dogs in science experiments, with interviews with oncologists, scientists, and the person responsible for the selection and training of the dogs. The proof of concept based on laboratory developed urine samples has been achieved and testing on urine samples from actual patients in hospitals and at GP clinics is underway.

Another ongoing project is the development of R software to carry out analysis on the complete set of motivational statistics learning videos on the ISLP. All data is currently available in Excel format and when the R code is complete at the end of this year, I shall advise. Any software can be used at the moment. Genstat files are available with lessons but R software, now widely used and free, will replace all the genstat analyses.

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FINLAND

Project News

Elisa Falck*

Despite the pandemic, the ISLP project is still advancing its initiatives and maintaining its basic functions. Some new, interesting things are being planned, and as can be seen from the articles in this Newsletter, the country coordinators and members of the ISLP network have been as active as ever in organizing different events and activities. Here is the latest news of what is going on in the project "behind the scenes"!

The ISLP Poster Competition is currently ongoing. The jury has been busy evaluating the posters, and the winners will be announced in the World Statistics Congress 2021 online event.

The World Statistics Congress will also house the next ISLP Open Meeting. The Open Meeting welcomes all ISLP members to listen to the current news and progress of the project!

In the meantime, the project is also continuously seeking external funding to maintain its functioning – and expanding, as we are constantly receiving new members around the globe.

As usual, the project's executive group sends its warmest thanks to its country coordinators, who are promoting statistical literacy around the world on a voluntary basis. The project would simply not exist without you!

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In memoriam:

Seppo S. Laaksonen

(1944 – 2020)

Risto Lehtonen*
Reija Helenius**

It is with regret that we inform you that Seppo Laaksonen, ISI Elected member and Professor Emeritus of University of Helsinki, passed away after a serious illness on December 20, 2020, in Helsinki, Finland. He was 76 years old.

Seppo Laaksonen was an ISI Elected member since 1994 and has made significant contributions to the ISI community over the years. He was IASS Scientific Secretary from 2001 to 2003 and Vice President from 2007 to 2009. He participated in the activities of ISLP (IASE's International Statistical Literacy project) as the Finnish country coordinator and was an enthusiastic supporter of the project. He served as President of the Finnish Statistical Society.

Seppo Laaksonen was an internationally recognized researcher in the field of survey statistics and application. Notable areas of his research include the innovative use of register information, the treatment of missingness in surveys, and the comparability in multinational surveys.

Seppo was a pioneer in the use of Statistics Finland's micro-merged population and business registers for research of international impact. He utilized longitudinal databases in research on micro econometrics, business demography and related fields. He published influential papers in econometric journals in the 1990s. His effective networking led him to host the first Comparative Analysis of Enterprise Data (CAED) conference in Helsinki in 1996. To ensure maximum dissemination of the workshop results, Seppo invested considerable time and effort to produce the 500-page proceedings book, published in 1997. Following the success of the event, CAED conferences have been organized on a regular basis.

The statistical treatment of non-response was his long-term research topic. He merged household survey data with unit-level register information in his research and published innovative articles in international journals. As part of a multidisciplinary interest group of international researchers, he organized the Sixth International Workshop on Household Survey Nonresponse at Statistics Finland in 1995. The event and the extensive proceedings book were a success. Seppo contributed to numerous subsequent international workshops.

For 17 years, Seppo worked as a member of the European Social Survey (ESS) Sampling and Weighting Expert Panel, a widely appreciated academy-driven cross-national social survey, launched in 2001 and implemented semi-annually. The work focused on ensuring high quality national sampling and weighting procedures across the varied national data infrastructures.

Before his academic career, Seppo Laaksonen worked at Statistics Finland as a statistician in wage statistics, methods expert, and research manager. He also worked for Eurostat, the statistical office of the European Union. Seppo played a major role in the methodological advancement of the official statistics system of Finland. He had a significant academic career at the University of Helsinki where several generations of students enjoyed his courses on survey statistics.

Seppo Laaksonen retired in 2012 as Professor of Social Statistics. After retiring, he continued his international activities and research. His last book, Survey Methodology and Missing Data, Tools and Techniques for Practitioners, was published by Springer in 2018. A recent scientific hobby, happiness research, led to the publication in 2018 of the paper entitled 'Age happiness is more complex than U-shaped' in the 'Journal of Happiness Studies'.

The books and papers of Seppo Laaksonen were connected to real world problems and the world of official statistics. His diverse interests led to publications in the field of crime statistics, demography, education statistics, household consumption, time use, and more. Seppo collaborated on many international research projects, often under the European Union's Framework Programmes. He was a frequent traveler and was involved in several statistical consultation missions on behalf of the European Commission to Ethiopia, Hungary, Moldova, and Slovenia.

Seppo was an enthusiastic sportsman, who participated in the national 60 km rowing race every Summer and the 50 km national cross-country skiing competition every Winter. He is remembered fondly by Southampton University, where he spent the Summer of 2001 as a cheerful visiting scientist from Finland who travelled to the department every morning on roller skates. This story illustrates the positive nature and open-mindedness of Seppo Laaksonen, our unforgettable friend and colleague.

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PORTUGAL

Lower Secundary Portugal winnwers.

ISLP Portuguese Posters Competition 2020–2021

Maria M. Nascimento*
J. Pinto Martins**

On May 22, 2021, following the completion of the Portuguese phase of the ISLP 2021 Statistical Poster Competition, the national coordinators invited the national jury members, teachers, and students to a Zoom meeting to celebrate everyone's participation, congratulate the winners and gather feedback for future events.

The meeting commenced by awarding prizes to the first, second and third place winners. The national coordinators then thanked the teachers and students for their participation in the contest, with special thanks to the jury who only had a weekend to evaluate and appraise the posters. The challenging and complex learning environment created by the COVID-19 pandemic was highlighted, and the quality of work presented was acknowledged and commended.

A notable speech from the event by Pedro Campos, Deputy Director of the ISLP Executive is included below:

"I would like to start by thanking everyone. I think you all know how important statistical literacy is! In today's world we live with numbers, it is very important to know how to deal with these numbers, to know how to interpret a news article in the newspaper, to know that a number is wrong. And our role as teachers of Mathematics, Geography, Economics, whatever the subject, is fundamental in this area. So, I would just like to thank on behalf of the ISLP- which is responsible for this competition that will end soon in Amsterdam- everyone involved with the National Coordinators, all the peer jurors who evaluated the posters, the students' teachers, and all the students who made these posters, thank you very much."

Following this, recommendations were made for the dissemination of future editions of the competition. The rules of participation should be clearly outlined and an example of an application of the evaluation criteria should be provided. This will benefit students who may not have participated in a poster competition involving a statistical literacy topic before.

When asked, the teachers were very interested in the opportunity to participate in workshops on Saturdays to teach students how to use the JMP software, make digital posters, and acquire statistical data from official Portuguese sources.

Undergraduate 2021 National Winners.

Upper Secundary Portugal winnwers.

Despite school closure due to the pandemic, the teachers highlighted that it was a great experience to work with their students and that the students displayed great teamwork and commitment to the project. A student called Sara spoke at the event. She thanked her teacher Alice, her colleagues and ISLP for the opportunity to participate, stating that she loved the experience and found it very interesting and constructive.

One Teacher called Helder Martins shared the positive impact that this competition has already had on the school beyond participation in the competition itself. For the theme of "Sustainable Development", one of his teams decided to make a poster about the Norwegian cod entitled "Impact of Portuguese consumption on cod stocks in Norway". The group contacted the Norwegian Embassy in Portugal to acquire data. After some time, the Norwegian Embassy expressed their interest in this initiative and contacted the team asking them to make a short video with the content of the poster to be used at the Norwegian Seafood Council.

This was highly praised by everyone at the meeting and students were able to see the result of their work valued! This is statistical literacy in action!

Finally, we present the numbers of participants involved in this ISLP 2020-2021 Portuguese Poster Competition (Table 1). This year, Portugal had the highest number of participants and posters. However, there is still potential to improve our outreach to include all school years, particularly in higher education.

Table 1- Numbers of the ISLP Portuguese Posters Competition 2020–2021

Group	Number of posters	Number of students
3.º Cycle (ages 13–15)	6	20
Secondary (ages 16–18)	28	124
Higher education (bigger than 18)	2	6
TOTAL	36	150

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CHILE

Experiencia chilena en Concurso ISLP-Chile 2020

Hugo Alvarado*
y Soledad Estrella**

La coordinación de ISLP, *International Statistical Literacy* Project, tiene como propósito promover acciones educativas que favorezcan el desarrollo de habilidades de investigación, como la interpretación y evaluación crítica de datos e información estadística a través del diseño de un póster en el que se utilicen herramientas estadísticas básicas para visualizar y analizar el comportamiento de los datos. El año 2020 se establecieron actividades, tales como: reuniones de trabajo del equipo nacional ISLP con los profesores guías de estudiantes de su institución escolar; capacitación a estudiantes participantes sobre medidas estadísticas y gráficos; capacitación sobre elaboración de un póster estadístico; y, asesoría en el avance de los productos de los estudiantes. En el nivel universitario se capacitaron más de 400 estudiantes y 8 docentes; y en el nivel de secundaria, 3 estudiantes y 2 profesores de matemáticas. Consideramos que la actividad de analizar y resolver problemas en contexto, en equipos de estudiantes, potencia los procesos de aprendizaje y estimula el desarrollo del pensamiento estadístico.

En esta nueva experiencia de ISLP-Chile, nuevamente la ejecución del concurso fue positiva y enriquecedora, permitiendo una alta convocatoria en tiempos de pandemia, que promovió el contacto con la comunidad educativa, poniendo en la discusión la necesidad de abordar el tema de la formación integral y crítica de los ciudadanos y la formación en estadística de los futuros científicos y profesionales.

La implementación de ISLP-Chile 2020 evidenció varias fortalezas:

- Concurso en coherencia con las orientaciones internacionales “formación de ciudadanos del siglo XXI”.
- Nuevo sitio web de ISLP-Chile https://concursoposterestadistico.cl
- Integración de las TICs e ideas estadísticas en los posters de los estudiantes, junto a orientaciones sobre uso Excel a estudiantes y profesores.
- Excelente disposición de trabajo del equipo local del concurso, junto a profesores evaluadores y participantes como guías de acompañamiento de los trabajos de sus estudiantes.
- Alta convocatoria de estudiantes universitarios de distintas zonas del país que participaron en el concurso.
- Socialización del concurso y premiación mediante redes sociales de la Sociedad Chilena de Educación Matemática, SOCHIEM.
- Excelente disposición de los profesores colaboradores en la capacitación de docentes y estudiantes participantes: Lidia Retamal, Rosamel Sáez, Johanna Díaz, Noemí Cid.
- Importante apoyo de la Dirección de Extensión Académica y Servicios de la Universidad Católica de la Santísima Concepción, DEAS UCSC, por el financiamiento de la cobertura remota del evento, profesores colaboradores y premiación para los estudiantes.

Participaron estudiantes universitarios chilenos de tres ciudades (Concepción, Rancagua y Valparaíso), de la Universidad Católica de la Santísima Concepción, Universidad San Sebastián, Universidad de O´Higgins y Pontificia Universidad Católica de Valparaíso.

La selección de los posters ganadores, a nivel nacional se realizó en diciembre 2020. La convocatoria reunió 501 posters, de 498 estudiantes universitarios y de 3 estudiantes de educación secundaria.

GANADORES AÑO 2020

NIVEL SUPERIOR **Primer Lugar**: Verónica Aguirre y Óscar Quezada de la USS
Póster: Preferencias de compra del consumidor asociadas a la sustentabilidad.

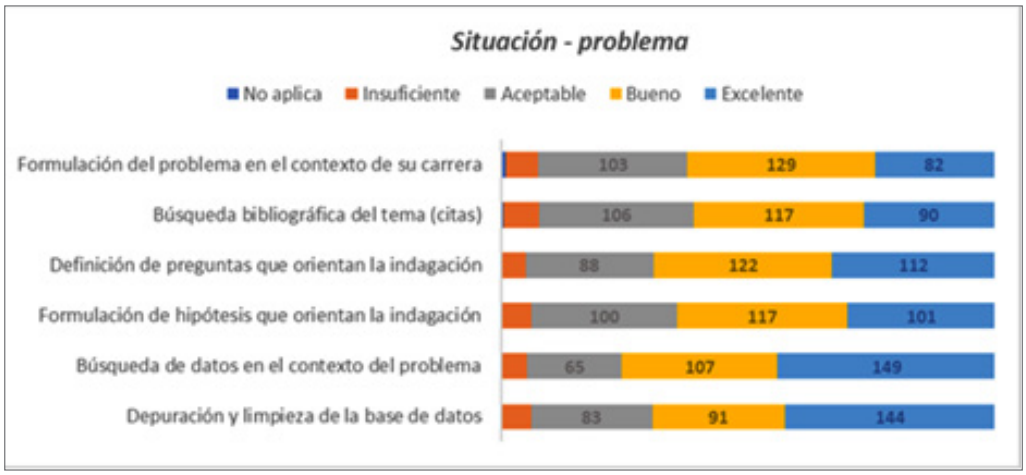


Figura 1. Evaluación de proceso de los estudiantes en fase Situación-Problema

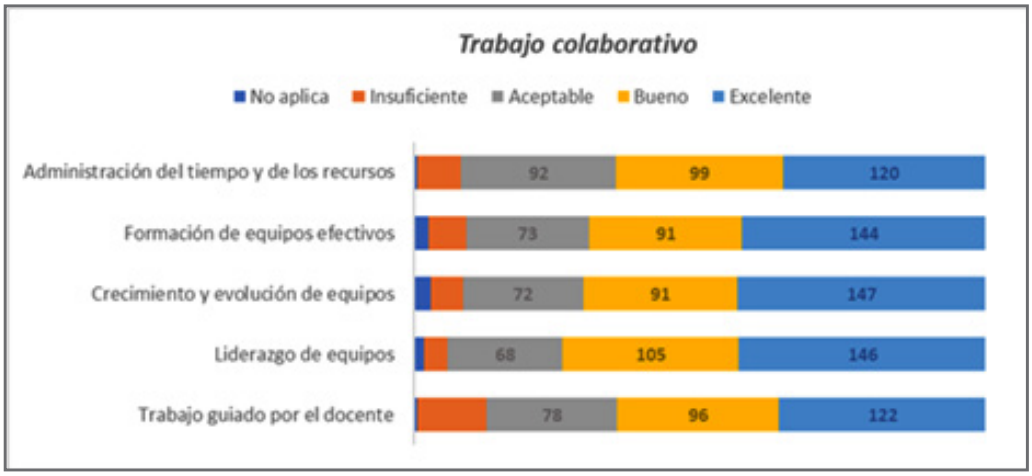


Figura 2. Evaluación de proceso de los estudiantes en fase Trabajo colaborativo

NIVEL SUPERIOR **Segundo Lugar**: Enoc Lemus y Daniela Fuentes de la UOH
Póster: Análisis estadístico del impacto ambiental de la construcción de muelle en la playa y humedal de Bucalemu.

NIVEL SECUNDARIA **Mención Honrosa**: Josefa Alarcón, Marcelo Burgos y Gabriela Neira, de Centro Educacional Evangélico de Hualpencillo
Póster: Consecuencias del calentamiento global en distintas regiones de Chile.

Al final del proceso se aplicó a los participantes un cuestionario de autovaloración sobre la percepción de logro alcanzado en las distintas fases del trabajo de aplicación estadística, obteniendo 339 respuestas.

En la Figura 1 se aprecia que en la fase de Situación-problema, la mayor parte de los estudiantes que respondieron la encuesta se autoevalúan en los niveles de aceptable, bueno y excelente, destacando los descriptores de búsqueda de datos en el contexto del problema y depuración y limpieza de la base de datos, donde mayoritariamente los estudiantes se autoevalúan en un nivel excelente. Los estudiantes se sienten más débiles en la formulación del problema en el contexto de su carrera y la búsqueda bibliográfica del tema (citas), un número importante de estudiantes se autoevalúa en los niveles de insuficiente.

La Figura 2 muestra la fase de trabajo colaborativo, la mayor parte de los estudiantes se autoevalúan en los niveles de aceptable a excelente, destacando la formación de equipos efectivos, crecimiento y evaluación de equipos y liderazgo de equipos. También, se autoevaluaron en el nivel insuficientes respecto de la administración del tiempo y los recursos y el trabajo guiado por el docente.

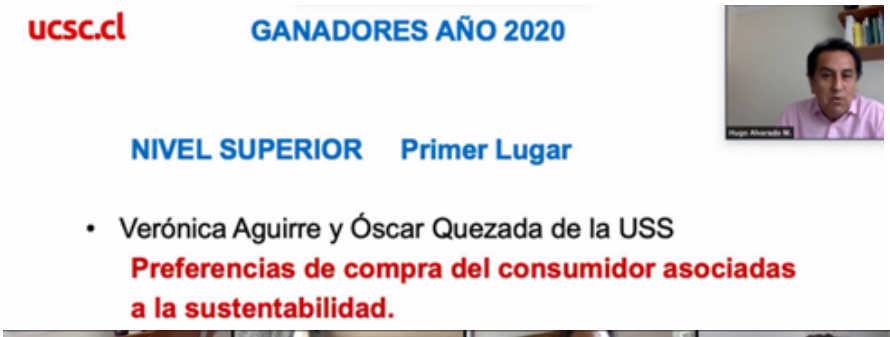
Finalmente, los estudiantes participantes en ISLP calificaron (en escala de 1 a 7) positivamente los indicadores respecto a que los conocimientos estadísticos ayudan a razonar críticamente, la estadística ayuda a entender el mundo de hoy, con un 6,3 en ambos indicadores; y asignaron un promedio de 5,7 al indicador que la estrategia de poster contribuyó a promover las ideas estadísticas básicas.

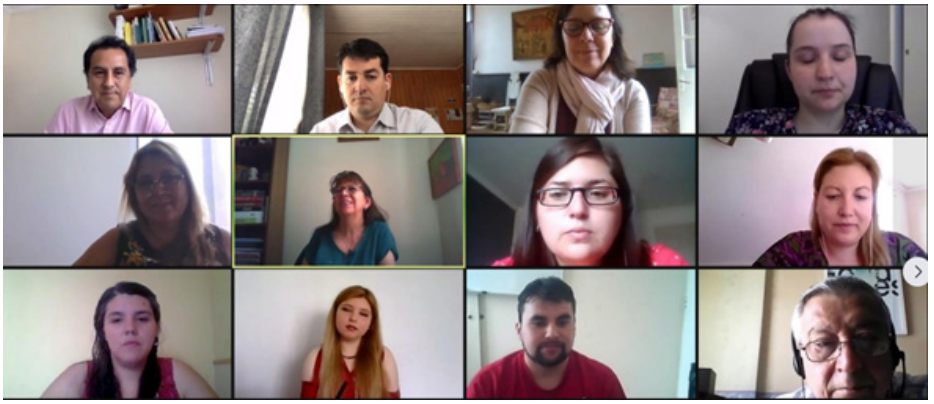
* Hugo Alvarado
**Soledad Estrella
Coordinadores Nacionales ISLP-Chile

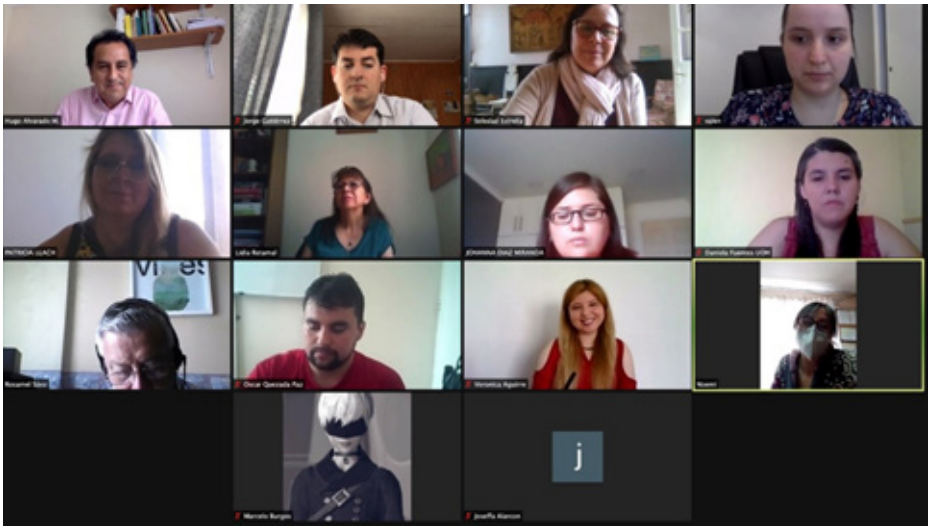
Anexos

1. AFICHE INFORMATIVO DEL CONCURSO PRESENTADO EN REDES SOCIALES.

2. CEREMONIA DE PREMIACIÓN VÍA ZOOM







3. Enlace de la página web del **concurso póster estadístico ISLP Chile 2020**

https://concursoposterestadistico.cl

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PANAMA

Concurso ISLP Panamá-2021. Una importante experiencia.

Elisa Mendoza* y Milagros García**

Panamá es un pequeño país de aproximadamente 4,2 millones de habitantes ubicado en América Central. Por primera vez participamos en la competencia Internacional ISLP Consurso de Póster 2020 – 2021, bajo el tema Medio Ambiente, Biología y Desarrollo Sostenible, como una oportunidad de fortalecer el aprendizaje de la estadística en el país.

Los esfuerzos se concentraron en los estudiantes universitarios debido a la oportunidad de invitarlos a participar en dicho concurso. Durante el año académico 2020 Panamá mantuvo durante dos o tres meses las clases escolares suspendidas y el resto del año académico se desarrolló de forma virtual, esto debido a la Pandemia originada por el COVID19 que afectó a gran parte del mundo.

Sin embargo, las universidades oficiales y algunas particulares se readaptaron a la nueva situación y lograron continuar las clases de manera virtual, entre ellas la Universidad de Panamá en la cual rápidamente, se logró conformar una comisión de docentes del Departamento de Estadística de la Facultad de Ciencias Naturales, Exactas y Tecnología para promover e impulsar el concurso con sus estudiantes, ya que era una población accesible en la virtualidad.

Durante la preparación para este concurso se realizaron diversas actividades que incluyeron:

- Una capacitación dirigida a estudiantes y docentes sobre la elaboración de póster científico. En ésta se contó con aproximadamente 40 participantes quienes aprendieron sobre la estructura de un poster, el objetivo y los tipos de pósteres, durante el mes de octubre (Foto 1).
- Se desarrolló una campaña de divulgación a nivel de la facultad dirigida a docentes y estudiantes para la inscripción en el concurso, durante los meses de noviembre y diciembre. Para esto se les facilitó información sobre las reglas del concurso, algunos lineamientos académicos, y las fechas importantes de cierre de inscripción, de entrega de póster y la fecha de premiación (Foto 2).
- A los tutores se les envió información de igual manera para que pudieran brindar una asesoría de acuerdo con las reglas del concurso.

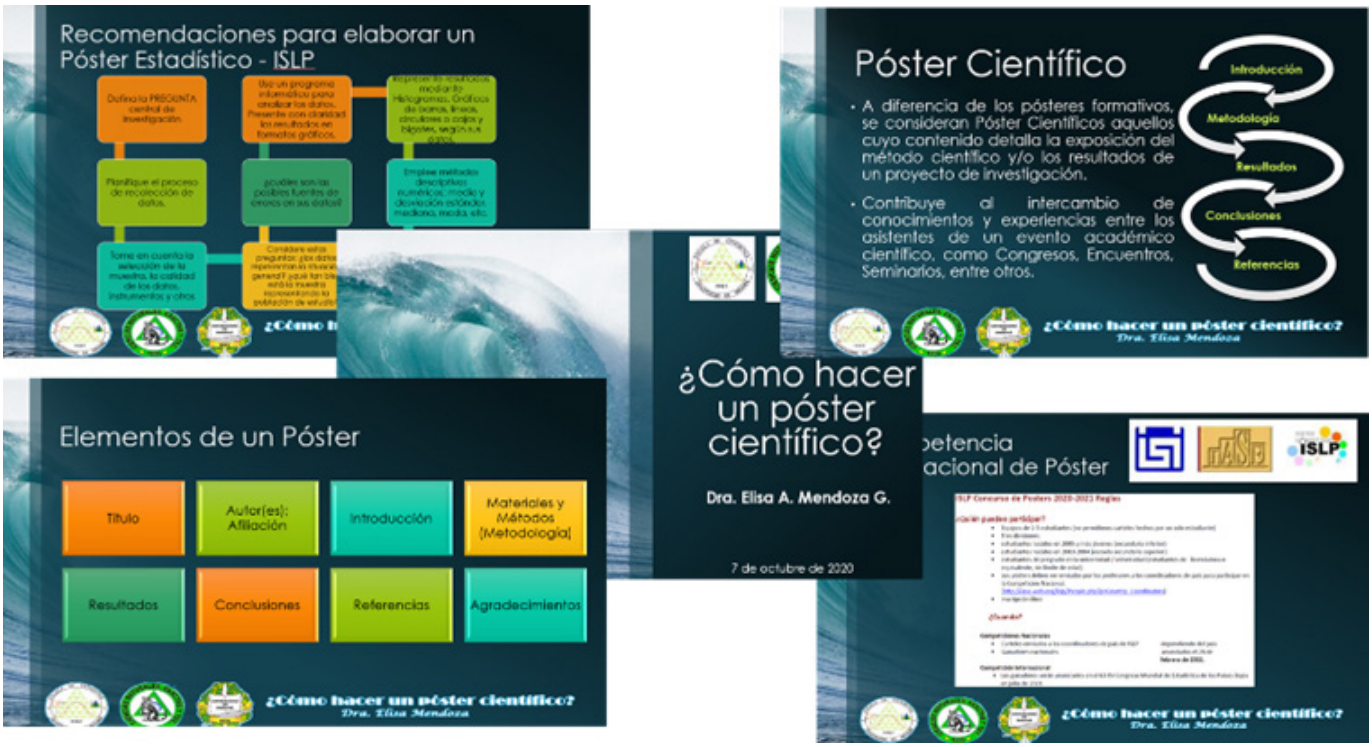

Foto 1. Capacitación: ¿Cómo hacer un póster científico? Panamá, 7 de octubre 2020.

Foto 2. Post de Invitación a la Premiación del Concurso de Póster. ISLP 2021

Foto 3. Capacitación "Software Estadístico JMP Básico" Marzo 2021.

Al cierre de la inscripción del concurso, se contó con la participación de 30 estudiantes distribuidos en 10 grupos; al finalizar el concurso, entregaron sus pósteres 20 estudiantes agrupados en 7 grupos.

Como parte de la premiación a todos los participantes, estudiantes y docentes, así como a los miembros del comité del concurso, jurados nacionales e internacionales, e invitados especiales se les dio una capacitación del uso del JMP durante una semana. Se contó con la presencia de la coordinadora latinoamericana ISLP, Adriana D'Amelio quien acompañó al equipo Panamá durante todo el proceso (Foto 3).

El Concurso Nacional de Póster ISLP Panamá, representó una importante actividad académica para los estudiantes quienes expresaron su gratitud al plasmar sus conocimientos y habilidades en un Póster académico y contribuir a la promoción de la Estadística en Panamá.

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FINLAND

Finnish Statistical Society – a hundred (and one) years

Elisa Falck*

Finnish Statistical Society is a scientific society for Finnish statisticians and students in the statistics programmes taught at Finnish universities. The Chairperson is Assistant Professor, Ph.D. Pauliina Ilmonen from Aalto University, Department of Mathematics and Systems Analysis.

The society was founded in 1920 with the purpose of advancing research, teaching and applications of statistics and bringing together statisticians.

The society is a member of the International Statistics Institute and the Federation of European National Statistical Societies. The society publishes the Scandinavian Journal of Statistics together with other Nordic statistical societies, whom with they also arrange the triannual Nordic Statistician's Meeting. They also host the Statistics Days (Tilastopäivät) biannually in Finland.

The society has established roots in the Finnish scientific community. For example, the tradition of organizing speaking events and seminars has been followed for decades. Recently these events have been organized in the form of webinars, which has made it easier for people to participate from different parts of the country – or even the world.

The Finnish Statistical Society has been co-operating with the International Statistical Literacy Project since the year 2019. The society offers important support in the form of networking efforts, grant seeking and funding. The project's current ongoing functions, such as this Newsletter, as well as new and upcoming initiatives would not be possible without the support of the Finnish Statistical Society.

The Society celebrated their centennial birthday in 2020. Due to the Covid-19 pandemic, there has not yet been an occasion to hold a party and celebrate the past 100 years. The ISLP would like to send its congratulations and best wishes to this well-established scientific society. Thank you for your ongoing support, as we keep promoting statistical literacy together.

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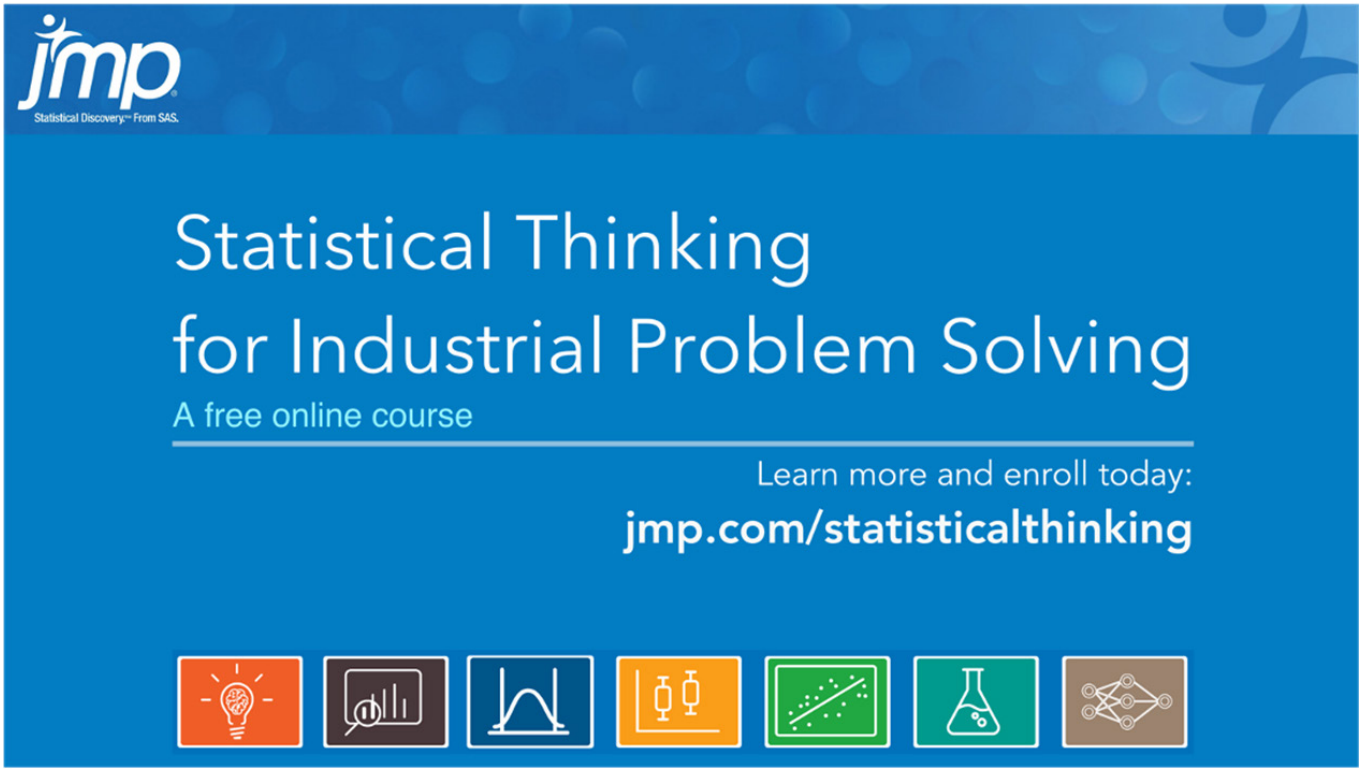
Invitation: Free JMP workshops during IASE Satellite Conference 2021

Deriving insights from data is a critical step in driving innovation and improving processes in practice. However at the core of this capability is a solid understanding of basic statistical methods that apply to many data-driven problems in practice.

In this interactive workshop, you will be introduced to a real-world case study as a teaching example, showing how a company was able to solve a costly manufacturing problem and improve yield by applying statistical methods. You will also get access to this and other examples built into the free online course "*Statistical Thinking for Problem Solving*" (see short video here) that helps build practical skills in using data to solve problems.

This 90 min workshop about "*Advancing a Culture of Data Analytics through Statistics Education*" will be presented twice by Volker Kraft, member of the JMP Academic Program, during the IASE online conference. Attendance is free, either on Monday Aug 30th at 5pm or Thursday Sep 2nd at 9am (Central European Time).

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