SSE UPDATE

POST-PRIMARY EDITION ISSUE 13 – October 2019

SSE 2016-2020 – what's been done and what's next?

Welcome to Issue 13 of SSE Update, the e-bulletin for post-primary schools.

We're entering the final year of the second SSE cycle. Circular 0040/2016 brings schools and the system to June 2020. Over the course of the cycle, schools have become more confident with the process and we know that many schools have really taken ownership of it, using it to focus on the things that are really important in their context at a particular time.

During the 2018/19 school year, inspectors continued to deliver a number of SSE seminars for school leaders and have continued to engage with schools through SSE advisory visits. High on the agenda for schools was the continued implementation of Junior Cycle and using the SSE process optimally to streamline the implementation process.

You may now be considering additional areas in which the SSE action planning process can be applied productively. In this bulletin we will look at the current national initiative for STEM education and how the SSE process can act as a useful vehicle for promoting STEM-based learning within your own school's context. In complementing the school's implementation of SSE, individual subject departments can use their own subject-specific expertise to map school-wide priorities to their subject context. We will look at a sample approach from a mathematics department.

Inspectors are continuing to provide SSE advisory visits in schools. These are non-evaluative visits from an inspector, at a time that is convenient for the school. The goal of these visits is to support schools with their process, so that it is having the impact that they want. Many schools are using these visits as an opportunity for the principal and members of the school's in-school management team to have a conversation with an external perspective on their process. It's helping them to refine their process and in many cases make it more manageable and sustainable. To request a visit simply e-mail info@schoolself-evaluation.ie with your school name and roll number.

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Applying the SSE process to the development of STEM

Given that STEM education is high on the national agenda, it may be worth considering how your school can progress STEM education in your own school context. In this article we will look at how SSE, in conjunction with the STEM Education Policy Statement 2017 – 2026 can support achievements in STEM within your school.

The four STEM disciplines are Science, Technology, Engineering and Mathematics. The policy statement summarises these disciplines as follows:

- **Science** enables us to develop our interest in, and understanding of, the living, material and physical world and develops the skills of collaboration, research, critical enquiry and experimentation.
- **Technology** covers a range of fields which involve the application of knowledge, skills and computational thinking to extend human capabilities and to help satisfy human needs and wants, operating at the interface of science and society.
- **Engineering** is about the design and creation of products and processes, drawing on scientific methods to provide the skills and knowledge to solve real-world problems.
- **Mathematics** equips us with the skills needed to interpret and analyse information, simplify and solve problems, assess risk, make informed decisions and further understand the world around us through modelling both abstract and concrete problems.

A challenge for schools in applying the SSE process to STEM is to identify a common thread which has relevance across all curricular areas and can thus be implemented on a school-wide basis. One such thread could involve the cross-curricular development of critical thinking skills. In a broad sense, critical thinking requires students to use their ability to reason. It is about being an active learner rather than a passive recipient of information. Critical thinkers rigorously question ideas and assumptions rather than accepting them at face value. Given the constant barrage of messages that our students are faced with through social media, the development of critical thinking skills is a crucial part of how we educate our students for life.

In mapping your thinking to *Looking At Our School*, the following extract from LAOS may be useful:

Standard	Statement of Effective Practice	Statement of Highly Effective Practice
Students have the necessary knowledge, skills and attitudes required to understand themselves and their relationships	Students demonstrate an enquiring attitude towards themselves and those around them	Students demonstrate an enquiring and **open-minded** attitude towards themselves and those around them

Having identified the development of critical thinking skills as your area of focus, how can you go about refining this focus into something that is manageable and that can be addressed on a school-wide basis? You could begin by asking some or all of the following questions:

- Do we involve our students in the development of classroom/school rules?
- Do we deliver information or do we ask questions?
- Do we ask "why?" as well as "who?" and "what?"
- Does our approach to homework/project work develop critical thinking skills?

In moving to the data gathering stage, it is important to remember to keep things manageable. You could begin with a staff/working group discussion in which a range of data gathering options could be discussed. Some of those options might include:

- Peer observation – the observer could create a tally of the different types of questions being asked and/or record the amount of time spent delivering information versus actively involving students.
- Conduct an audit of classroom codes of conduct – how many involved student input?
- Analyse a sample of homework assignments – establish whether or not there is an appropriate balance between lower-order recall-type tasks and higher-order tasks that require the development of critical thinking skills.

The above represents just a sample of the questions you could ask and the types of data gathering you could engage in. Once you have gathered the data, it is then time to analyse and make judgements. This should allow you to identify one or two areas that require development. Remember to also celebrate the areas in which you are doing well. Your SSE report is an opportunity to talk about your successes and to share those successes with the school community. By including areas for development, you demonstrate to students and parents that you are open to change and are actively trying to move the school forward.

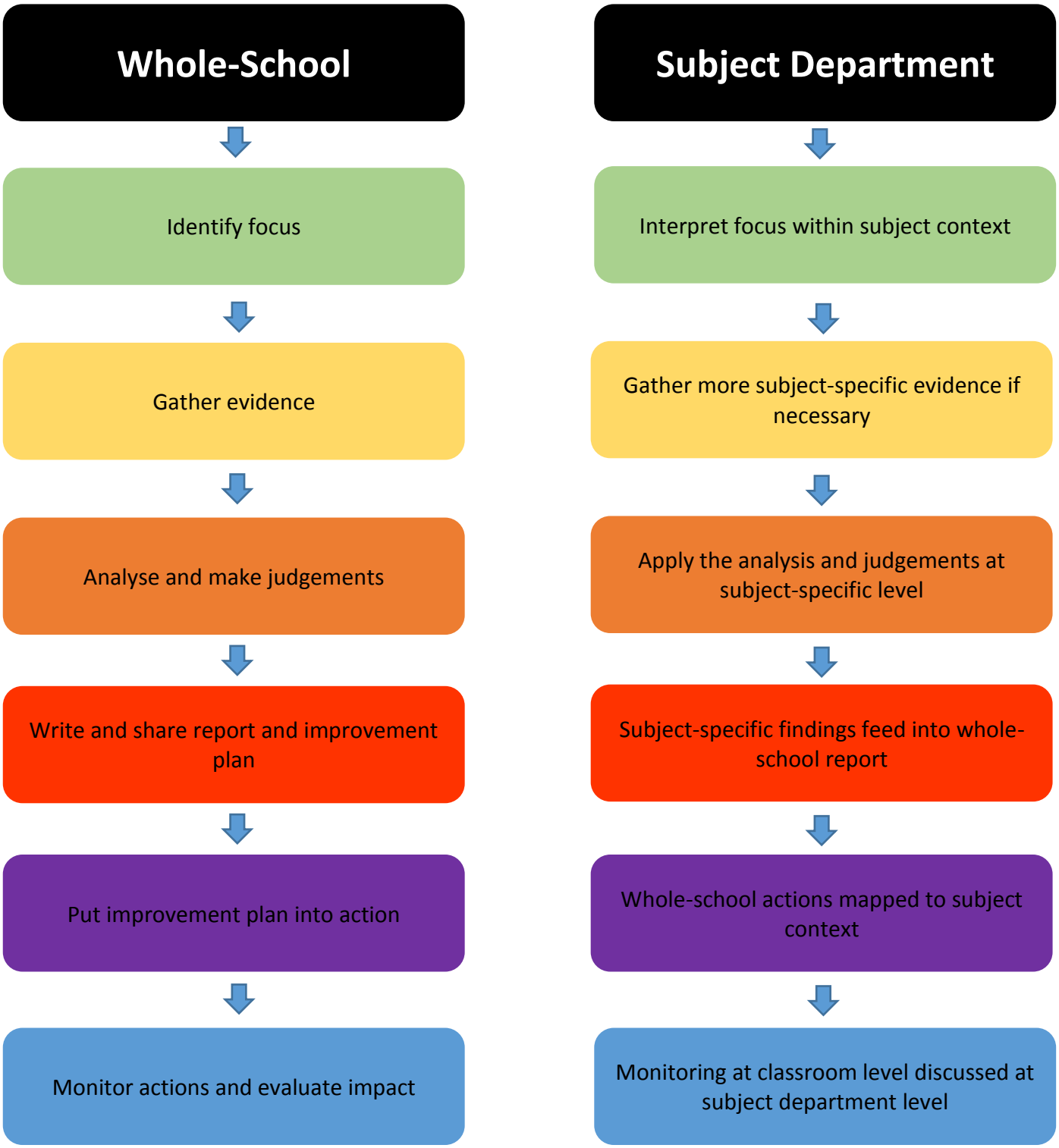
Your school improvement plan should include a small number of simple strategies that can be implemented by all teachers. For example, if you discover that homework assignments are overly geared towards the recall of information, subject departments could initially discuss types of homework assignment that would be more beneficial for the development of students' critical thinking skills. This will, in turn, assist teachers in adapting their approach to homework. If you discover a prevalence of lower-order questioning, whole-staff CPD in relation to questioning strategies could be a starting point in the development of a broader range of questioning strategies that can be implemented by all teachers.

In putting the improvement plan into action in classrooms, think as well about how you will monitor the success or otherwise of your classroom strategies with a view to evaluating their impact. It is a good idea, at the end of year one, to go through the same process of evidence gathering as you did at the start of the year. This will allow you to identify whether or not changes in practice have become embedded. However, the fact that changes in practice have occurred does not necessarily mean that student outcomes have improved. To establish this, you need to dig a little deeper. Perhaps you could ask the students about their experience and whether or not they have noticed a change. Do they feel more confident in thinking for themselves? Do they feel that they have more of a say in how things are done? Has the changed nature of their homework developed their ability to think for themselves? A short questionnaire or a student focus group should provide the required evidence.

Remember, small changes to practice when implemented school-wide can have a major impact on student outcomes. This is a message that is at the heart of SSE. The ability to think critically is a skill that is highly sought after by employers and is also a skill that is fundamental to entrepreneurship. Critical thinking enables students to distinguish between fake news and real news, to evaluate their relationships, to question those in authority and to think before they leap. It also allows students to continue to develop intellectually after the completion of their formal education. In the words of Socrates – "I cannot teach anybody anything, I can only make them think".

Mapping whole-school priorities to subject departments – a sample approach

If school-wide improvement planning is to have a significant impact in classrooms, it is important that subject departments engage actively with the process. One way of achieving a high level of engagement might be for subject departments to develop a means of mapping whole-school priorities to their regular developmental work. The diagram below looks at how the six steps of the SSE process might be applied by a subject department in a way that would complement the school-wide approach:



In the following example, the school-wide SSE focus for the year was on improving the learner experience with a view to enhancing student wellbeing and supporting higher outcomes. The table charts how the teachers of Mathematics made their own of the process while complementing school-wide actions.

	Whole-School	Mathematics Department
Identify focus	Improve the learner experience with a view to enhancing student wellbeing and supporting higher outcomes	Teachers asked the following questions of themselves • Are students presented with rich and appropriately challenging tasks that develop solution curiosity? • Do students engage in investigative activities that stem from their own interests and questions?
Gather evidence	• Focus group of students • Questionnaire for sample of students	• Teachers discussed with their own students • A sample of student's work was examined for evidence of disengagement
Analyse and make judgements	How good is the learner experience in our school?	How good is the learner experience in Mathematics?
Write and share report and improvement plan	The school-wide learner experience is in need of improvement	Students regularly engage in investigative activities; however more activities could stem from their own interests and questions
Put improvement plan into action	Cross-departmental collaboration on how to improve the learner experience	Collaboration within the mathematics department on the development of richer tasks
Monitor actions and evaluate impact	• Was the process manageable? • Was the process meaningful? • How did the plan support improvement in wellbeing and outcomes?	• Was the process manageable/meaningful in Mathematics? • How can we continue to support the process?

Reminders of Supports for SSE

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