To be or to inspire: What Personal Project means for students as they move towards further education in the Diploma Programme.

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# Why?

 The Extended Essay encourages students to "develop the skills of independent research that will be expected at university", by investigating "a topic of special interest that they have chosen themselves" (Extended Essay guide, page 2)

 Personal Project is a "student-centred, ageappropriate project that helps students construct their own conceptual understandings" (Personal Project guide, page 2)



# Self-regulated Learning (SRL)

- "Active and constructive process that makes learners responsible for their own learning"
- Including: "goal setting, using effective strategies to organize learning, monitoring performance, self-awareness, motivation, and holding positive beliefs about capabilities" (Boom et al., page 533).



#### If students are SRL learners

 Have the ability to shape and adapt their own learning to suit their needs in terms of processing information and also due to changing circumstances (for example, time constraints etc.) Pintrich



### **Key aspects of SRL:**

- Students' approach to learning
- Students' motivation to achieve academically
- Students' cognitive style Munro



#### PP and EE?

 It is within this framework that students have to complete both the Personal Project and the Extended Essay



## Old guide

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### New guide

# A Planning and development (max. 4)

- identify a clear and achievable goal
- describe and justify a focus on the chosen area(s) of interaction
- describe the steps followed to achieve the stated goal
- adhere to the stated goal
   throughout the project.

#### B Define the goal (max. 4)

- identify and explain a topic based on personal interest
- justify one focus area of interaction as a context for the project
- outline a clear, achievable, challenging goal
- create specifications that will be used to evaluate the project's outcome/product.



#### SAME:

- Clear achievable goal
- Aol (From Areas to one Area)

- OLD
  - Steps taken should be described
- NEW
  - Design specifications should be included to assess the final outcome/product



### **EE** guide

- A: research question (max. 2) & B: introduction (max. 2)
- Objectives:
  - 1. plan and pursue a research project with intellectual initiative and insight
  - 2. formulate a precise research question
  - 5. present their extended essay in a format appropriate to the subject, acknowledging sources
     one of the established academic ways

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- SAME:
  - Goal (B)
  - Planning how goal will be achieved (O)
- DIFFERENT:
  - Context differs for EE it's the subject for PP it's the AoI's (B)
  - No measurement of success for EE (N)



# Old guide

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## New guide

- B Collection of information/ resources (max. 4)
- select and use adequate, varied resources
- identify and use relevant information critically
- acknowledge sources of information appropriately.

- C Select sources (max. 4)
- select varied, relevant sources to achieve the goal
- evaluate sources.



#### SAME:

Varied and relevant sources

- OLD
  - Acknowledge the sources of information
- NEW
  - Evaluate the sources



### **EE** guide

- C: investigation (max. 4)
- Objectives:
  - 1. plan and pursue a research project with intellectual initiative and insight
  - 3. gather and interpret material from sources appropriate to the research question



#### • SAME:

- Range of sources (B)
- Goal is achieved/ research question is addressed (B)

- No explicit descriptor given for sourcing (acknowledge and evaluating), although it is implied
   (B)
- Amount of sources is not defined (B)



# Old guide

# C Choice and application of techniques (max. 4)

- choose techniques relevant to the project's goal
- justify this selection
- apply the chosen techniques consistently and effectively.

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### New guide

#### F Reflect on learning (max. 4)

- reflect on how completing the project has extended their knowledge and understanding of the topic and the focus area of interaction
- reflect on how they have developed as a learner by completing the project.

#### SAME: DIFFERENT:

- Closest
   match,
   but it is
   two very
   different
   criteria
- OLD
  - Focus was on describing the techniques that was used and could be used
  - Word limit did not allow students to discuss this sufficiently
  - Justify why a technique was chosen

#### NEW

- On-going reflection about the development of the project
- Reflection regarding personal growth (IBLP)



### **EE** guide

- Criterion F: application of analytical and evaluative skills appropriate to the subject
- Criterion G: use of language appropriate to the subject



#### • SAME (O):

- Techniques that needs to be used should be explained
- Application of techniques should be consistent

- No explicit descriptor given for reflection, either as personal growth or knowledge (N)
- Data handling is important in EE (Sciences), but not in PP (B)
- Language usage in not important in PP and much less nspiring formal than in EE (B)

### Old guide

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### New guide

# D Analysis of information (max. 4)

- analyse the information in terms of the goal and the focus of the project
- express personal thought
- support arguments with evidence
- respond thoughtfully to ideas
   and inspiration.

# D Apply information (max. 4)

 transfer and apply information to make decisions, create solutions and develop understandings in connection with the project's goal.

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#### SAME:

- Analyse/transfer information to achieve the goal
- Support arguments with evidence

- OLD
  - Personal thought



### **EE** guide

- D: knowledge and understanding of the topic studied (max. 4) & E: reasoned argument (max. 4)
  - 1. plan and pursue a research project with intellectual initiative and insight
  - 3. gather and interpret material from sources appropriate to the research question
  - 4. structure a reasoned argument in response to the research question on the basis of the material gathered
  - 7. apply analytical and evaluative skills appropriate to the subject, with an understanding of the implications and the context of their research.

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#### • SAME:

- Application of information (B)
- Supporting arguments with information (B)

- EE expects students to be systematic in approach
- Personal thought is not included in EE (O)



# Old guide 8

# E Organization of the written work (max. 4)

- organize their work in a coherent manner according to the required structure
- present information clearly
- present references, bibliography and symbolic representations appropriately.

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### New guide

# G Report the project (max. 4)

- organize the project report according to the required structure
- communicate clearly, coherently and concisely, within required limits
- acknowledge sources according to recognized conventions.

#### SAME:

- Organisation according to the required structure
- Acknowledging of sources
- Clear presentation of work

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#### **DIFFERENT:**

 Use of language differs in descriptors

### **EE** guide

- I: formal presentation
- Objective:
  - 5. present their extended essay in a format appropriate to the subject, acknowledging sources in one of the established academic ways



#### • SAME:

- Organisation according to the required structure(B)
- Acknowledging of sources (B)
- Clear presentation of work (B)

#### DIFFERENT:

No obvious differences



### Old guide

#### F Analysis of the process and outcome (max. 4)

- identify the strengths and weaknesses of the project at different stages of development
- where appropriate, suggest ways in which the project could have been tackled differently
- assess the achieved results in terms of the initial goal and the focus on the chosen area(s) of interaction
- show awareness of the overall perspectives related to the chosen topic or piece of work.



### New guide

#### E Achieve the goal (max. 4)

- evaluate the outcome/product against their own specifications for success.
- Students award a level that relates to the descriptors in criterion E in collaboration with their supervisor.



#### SAME:

 Achievement of the outcome

- OLD
  - "Big criteria"
  - Development at different stages (now in new crit. F)
  - Continuous reflection at different stages
- NEW
  - Design specification exist that the project is assessed against
  - Students is actively part of this process



### **EE** guide

- H: conclusion; J: abstract & K: holistic judgment
- Objectives:
  - 1. plan and pursue a research project with intellectual initiative and insight
  - 4. structure a reasoned argument in response to the research question on the basis of the material gathered
  - 5. present their extended essay in a format
     appropriate to the subject, acknowledging sources in
     inspiring one of the established academic ways

#### SAME:

Evidence is expected as an outcome for both PP and EE

#### DIFFERENT:

- Focus is on the outcome of the written essay (EE) and how the outcome and evidence lends itself to it (O)
- For the PP the outcome is centred around the product
- Students are not involved in allocating an aspect of their grade (N)
- Abstract & new PP



Depth of knowledge and understanding is explicit in EE

## Old guide

#### &

### New guide

# G Personal engagement (max. 4)

- meet deadlines
- follow agreed procedures and work plans
- make appropriate use of a process journal
- show initiative, enthusiasm and commitment to the task.

# A Use the process journal (max. 4)

- demonstrate
   organizational skills
   through time and self management
- communicate and collaborate with the supervisor
- demonstrate information literacy, thinking and reflection.

#### SAME:

- Organisational skills (meet deadlines)
- Use a process journal as a tool for recording information



- OLD
  - Meet deadlines
- NEW
  - Organisational skills is extended to include more than meeting deadlines
  - Bigger focus on reflection,
     information literacy and thinking
  - Collaboration and communication with supervisor

### Descriptors that doesn't match

- PP Old G & new A, no corresponding EE (reflection & journal)
- No reference to personal engagement



# The study

- ACS Egham International School
- n = 69
- Non-selective
- Reliability
- Environment
- MSLQ Pintrich et al.



#### **Definitions**

- MODE = most frequent value
- MEAN = average of values
- RANGE = possible values
- STANDARD DEVIATION
  - Quantity calculated to indicate the extent of deviation for a group as a whole
  - The more spread apart the data = the higher the deviation.



## Value component: Intrinsic Goal Orientation

- Perception of why participating in a task
- <u>Degree</u> of involvement for reasons such as:
  - Challenge
  - Curiosity
  - Mastery
- End all to itself, rather than a means to an end



- I prefer independent work (Personal Project/ Extended Essay) that is challenging so I can learn new things
- Mode = 5
- Mean = 4.661538462
- Standard Deviation = 1.384273462



- It is important for me to learn from my Personal Project/Extended Essay
- Mode = 5.5
- Mean = 5.014925373
- Standard Deviation = 1.540425773



- I often choose paper topics I will learn something from even if they require more work.
- Mode = 4
- Mean = 4.208955224
- Standard Deviation = 1.511521063



- I think that what I learned in Personal Project was interesting
- Mode = 4
- Mean = 4.435483871
- Standard Deviation = 2.114626237



- I think that what I'm learning in Extended Essay is interesting
- Mode = 7
- Mean = 5.8
- Standard Deviation = 1.545500381



- I know that I will be able to learn from my Extended Essay
- Mode = 5
- Mean = 5.423728814
- Standard Deviation = 1.317462762



- Understanding what I need/needed to do with my Personal Project/Extended Essay is important to me
- Mode = 7
- Mean = 5.328358209
- Standard Deviation = 1.449529617



## Value component: Extrinsic Goal Orientation

- <u>Degree</u> of involvement for reasons such as:
  - Grades
  - Rewards
  - Performance
- High in extrinsic goal orientation, learning is a means to an end
- Main concern of the student is in issues that are not directly related to task itself

- Compared with other students in my grade I have done well in my Personal Project
- Mode = 6
- Mean = 4.564516129
- Standard Deviation = 1.863234854



- I received a good grade in my Personal Project
- Mode = 5
- Mean = 4.612903226
- Standard Deviation = 1.790249926



- Compared with other students in my grade I think I knew a great deal about the Personal Project
- Mode = 3
- Mean = 3.790322581
- Standard Deviation = 1.695697561



- Compared with other students in my grade I expect to do well in my Extended Essay
- Mode = 5
- Mean = 5.126984127
- Standard Deviation = 1.133782313



- Compared with other students in my grade I think I know a great deal about the Extended Essay
- Mode = 5
- Mean = 4.0222222
- Standard Deviation = 1.794917378



- I work hard to get a good grade even when I don't like a class
- Mode = 6
- Mean = 5.352941176
- Standard Deviation = 1.432446548



#### Value component: Task Value

- Student's evaluation of task in terms of:
  - How interesting
  - How important
  - How useful
- High task value = more involvement learning



- I liked what I learned while doing my Personal Project
- Mode = 6
- Mean = 4.64516129
- Standard Deviation = 2.07206282



- I liked what I am learning in my Extended Essay
- Mode = 7
- Mean = 5.794117647
- Standard Deviation = 1.255093429



- I have been able to use what I've learned in my Personal Project (skills, etc.) in other classes
- Mode = 4
- Mean = 3.129032258
- Standard Deviation = 2.043746331



- I have been able to use what I've learned in my Personal Project to help me with my Extended Essay
- Mode = 0
- Mean = 2.96875
- Standard Deviation = 2.172043609



### Expectancy component: Selfefficacy for learning and performance

- Expectancy for success relates to task performance
- Self-efficacy includes judgments about your own ability to accomplish a task & confidence in your skills to perform that task



- I have done well in my Personal Project
- Mode = 6
- Mean = 4.822580645
- Standard Deviation = 1.800754264



- I expect to do very well in my Extended Essay
- Mode = 6
- Mean = 5.253968254
- Standard Deviation = 1.296738937



- I think I will receive a good grade in my Extended Essay
- Mode = 5
- Mean = 4.949152542
- Standard Deviation = 1.307393951



- It is hard for me to decide what the main ideas are when I'm doing research
- Mode = 4
- Mean = 3.867647059
- Standard Deviation = 1.885739142



- Even when study materials are dull and uninteresting, I keep working until I finish
- Mode = 4
- Mean = 4.23880597
- Standard Deviation = 1.69361886



# **Expectancy component: Control of learning beliefs**

- Students' belief that efforts will result in positive outcomes
- Belief that outcomes are dependent on own effort
- Students higher = higher probability to study more strategically and effectively



- Compared with others students in my grade, I think I'm a good student
- Mode = 5
- Mean = 5.308823529
- Standard Deviation = 1.140914918



- I had an uneasy, upset feeling when I thought about Personal Project while doing it
- Mode = 2
- Mean = 3.64516129
- Standard Deviation = 1.935215035



- I have an uneasy, upset feeling when I think about Extended Essay
- Mode = 7
- Mean = 4.163934426
- Standard Deviation = 2.181744887



- My study skills are excellent compared with others in my grade
- Mode = 4
- Mean = 3.850746269
- Standard Deviation = 1.363202237



- I worried a great deal about my Personal Project while I was doing it
- Mode = 4
- Mean = 3.850746269
- Standard Deviation = 1.363202237



- I worry (will worry) a great deal about my Extended Essay
- Mode = 6
- Mean = 5.046875
- Standard Deviation = 1.699537506



- While I'm doing my Personal Project/Extended Essay I think about how poorly I am doing (am going to do) – REVERSED
- Mode = 2,6
- Mean = 3.161764706
- Standard Deviation = 2.111664343



# Resource management strategies: Help seeking

- Students have to learn to manage support of others
- Peers and instructors
- Good students = know when they don't know and are able to identify someone that can assist
- Peer help, peer tutoring and individual teacher assistance facilitate student
   eachievement

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- When I work (worked) on my Personal Project/Extended Essay, I try to remember what my supervisor said so I can complete my Personal Project/Extended Essay so that it contains the correct information.
- Mode = 5
- Mean = 4.86440678
- Standard Deviation = 1.346151163

## Cognitive and Metacognitive strategies: Elaboration

- Helps store information into long-term memory – building internal connections between items learned
- Strategies:
  - Paraphrasing; Summarizing; Creating analogies;
     Generative note-taking
- Help integrate and connect new info with prior knowledge

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- When I study I put important ideas into my own words
- Mode = 5
- Mean = 4.808823529
- Standard Deviation = 1.447689365



# Cognitive and Metacognitive strategies: Metacognitive Self-Regulation

- Metacognition: Awareness, knowledge and control of cognition
- Processes that make up metacognitive selfregulatory activities:
  - Planning
  - Monitoring
  - Regulating inspiring education

## Cognitive and Metacognitive strategies: Elaboration

- Help students store information into LT memory by building internal connections between items learned
- Help students integrate and connect information with prior knowledge
- Include:
  - Paraphrasing, Summarizing, Creating analogies
  - Generative note-taking inspiring education

- I ask myself questions to make sure I know I'm doing the correct thing in my Personal Project/Extended Essay
- Mode = 5
- Mean = 4.388059701
- Standard Deviation = 1.611110898



- I always try to understand what my guide (Personal Project/Extended Essay) is saying even if it doesn't make sense
- Mode = 6
- Mean = 5.176470588
- Standard Deviation = 1.382040015



- I use what I have learned from old homework assignments and the textbook to do new assignments
- Mode = 6
- Mean = 5.205882353
- Standard Deviation = 1.388596663



- I find that when the teacher is talking I think
  of other things and don't really listen to what
  is being said
- Mode = 5
- Mean = 3.75
- Standard Deviation = 1.912612934



- When I am studying a topic, I try to make everything fit together
- Mode = 5
- Mean = 4.985074627
- Standard Deviation = 1.310036314



- When I'm reading I stop once in a while and go over what I have read
- Mode = 5
- Mean = 4.441176471
- Standard Deviation = 1.709681368



- When reading I try to connect the things I am reading about with what I already know
- Mode = 5
- Mean = 5.117647059
- Standard Deviation = 1.490454054



### Resource management strategies: Effort Regulation

- Students' ability to control their effort and attention in face of distractions and uninteresting tasks
- Self-management and reflects commitment to completing study goals – even if there are difficulties and distractions
- Important for academic success, signifies goal commitment and regulate continued use of learning strategies

- When work is hard I either give up or study only the easy parts
- Mode = 2
- Mean = 2.772727273
- Standard Deviation = 1.96017512



- I work on practice exercises and answer end of chapter questions even when I don't have to.
- Mode = 4.5
- Mean = 3.567164179
- Standard Deviation = 2.124651898



### Cognitive and Metacognitive strategies: Organization

- Select appropriate information and construct connections among information learned
- Examples:
  - Clustering
  - Outlining
  - Selecting main ideas
- Active, effortful endeavor and results in learner being closely involved in task = should
   education result in better performance

- When studying, I copy my notes over to help me remember material
- Mode = 2,7
- Mean = 3.632352941
- Standard Deviation = 2.412616421



- When I read materials for this class, I say the words over and over to myself to help me remember
- Mode = 3
- Mean = 4.235294118
- Standard Deviation = 1.978692728



- I outline the chapters in my book to help me study
- Mode = 5
- Mean = 3.882352941
- Standard Deviation = 2.131896503



### Resource management strategies: Time and Study Environment

- Students must be able to manage & regulate their time and study environments
- Time management:
  - Scheduling; Planning; Managing one's study time;
     Effective use of study time & setting realistic goals
- Study environment:
  - Where student does the work
  - Ideally: organised, quiet and free of visual and auditory



- When I study for a test I practice saying the important facts over and over to myself
- Mode = 7
- Mean = 4.701492537
- Standard Deviation = 2.037081065



- Before I begin studying I think about the things I will need to do to learn
- Mode = 6
- Mean = 4.661764706
- Standard Deviation = 1.659290193



## Cognitive and Metacognitive strategies: Critical Thinking

- Degree to which students report applying previous knowledge to new situations to:
  - Solve problems
  - Reach decisions
  - Make critical evaluations with respect to standards of excellence



- I often find that I have been reading for class but don't know what it is all about
- Mode = 2
- Mean = 3.529411765
- Standard Deviation = 1.842876494



#### **Our success stories:**

- Shakespeare Abigail
- Neuro-feedback and ADHD Wilson
- Physics of long jump Maria
- Cycle to France Adam



#### Self-Crafted Cricket Bat A Hit During Cricket World Cup

4 March 2011

A student from ACS Egham International School has crafted his own cricket bat as part of a project that aims to explore the science and craftsmanship behind a good bat. Trigun Soni, 15, has hopes of a career in professional cricket and has spent eight weeks making and perfecting a bat built from willow.

The project was part of the International Baccalaureate Middle Years Programme (IBMYP) personal project, for which students are tasked to create something personal that challenges them and requires their initiative. Trigun's project was on display at ACS Egham on Wednesday 23rd February during the exhibition that marked the end of the assignment for him and his 46 classmates.

Trigun developed the bat based on his personal physique and cricket style. To finish the project, the bat was put through its paces and tested at hitting balls, with the same tests being carried out on a factory-produced bat.

Trigun said: "My interest in cricket inspired me to do this project and I always wanted a bat built according to my own requirements. Overall it was a successful project but even though my bat is good, the mass manufactured one is very well made and very light to play with."



Self-Crafted Cricket Bat A Hit During Cricket World Cup

Trigun is pictured with his self-made cricket bat

Trigun, who is British Indian, is a proud supporter of India and has been enjoying the recent dramatic clash between England and India in the ICC Cricket World Cup.

"I thought India were going to win with their huge score of 338. But with the partnership of Andrew Strauss and Ian Bell for England it was quite worrying at times and I thought England might clinch it. Then it ends in a draw! It was a fascinating match."